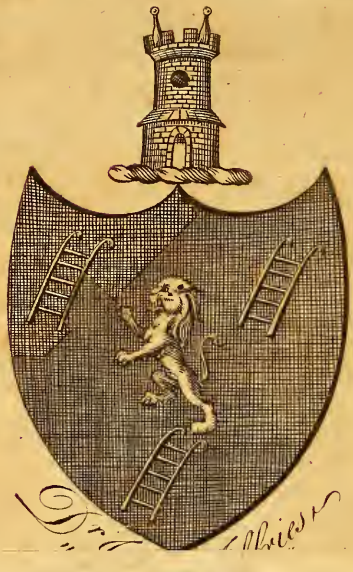

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A

TREATISE

ON THE

Diſeaſes of Women;

In which it is attempted to join a juſt Theory to the moſt ſafe and approved Practice.

WITH

A Chronological Catalogue of the Phyſicians, who have written on theſe Diſeaſes.

Tranſlated from the FRENCH Original;

Written by Dr. *J. ASTRUC*, Royal Profeſſor of Phyſic at *Paris*, and conſulting Phyſician to the King of *FRANCE*.

In hoc gaudeo aliquid diſcere, ut doceam: nec me ulla res delectabit, licèt eximia ſit & ſalutaris, quam mihi uni ſciturus ſim.
Senec. *Lib. I. Epiſt.* 6.

VOL. I.

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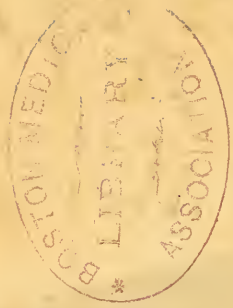

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PREFACE

OF THE

AUTHOR.

THE art of medicine is in a continual ſtate of improvement; but, in proportion as it advances, the ſtudy of it becomes more difficult. To be regarded, formerly, as an able phyſician, nothing more was wanting, than to be acquainted with the principal paſſages of Hippocrates, and Galen; and informed of the means employed to reconcile their contradictions: to know the names, and definitions of diſeaſes; and comprehend their apparent cauſes: to have the memory furniſhed with ſome recipes, ſanctified by long uſe, and tranſmitted from one hand to another; or ſervilely copied in books: and after all, to take ſhelter opportunely in the doctrine of occult qualities, when any difficulty occurred, of which the ſolution was not to be found.

At preſent, to deſerve the ſame title, it is requiſite to have qualifications much more exten-

ſive; and much leſs eaſy to be acquired. It is neceſſary to know the ſtructure of all the parts of the body: to underſtand their proper functions, and the mechaniſm ſubſervient to the execution of them: to judge of the diſorders, to which they are ſubject; and which are the ſource of diſeaſes: to diſtinguiſh the characters or differences of each of theſe diſorders; and, by this means, the different kinds of the diſeaſes themſelves: to determine the ſeat, nature, and immediate cauſe of each: to deduce thence the general opinion that ought to be formed, and the intentions of cure that ought to be perſued: to be thoroughly apprized of the different aids, which may be obtained from the *Materia Medica*, either in the ſimple or compound remedies that it ſupplies, in order to chuſe, on every occaſion, thoſe which are beſt accommodated to the end propoſed: and to underſtand how to employ and modify them with prudence, as circumſtances may require.

In the attainment of theſe different qualifications, it is requiſite to guard againſt blindly following our own imagination; and ſubſtituting conjectures, *hypotheſis*, and meer ſuppoſitions, for truths. This is too apt to be the caſe, when we begin to throw off the yoke of the antients; which, by giving medicine the air of romance, has not a little contributed, though unjuſtly, to diſcredit it.

In a ſcience of ſo much importance, nothing ought to be advanced, but what is founded on the known ſtructure of the diſeaſed parts; on facts which fall continually under our cognizance

in

in practice, and are generally admitted; or just observations, published by physicians on whom we may depend, respecting such facts as are of a singular nature, and seldom occur. If we are obliged to make any *hypotheſis* to explain difficult points, as sometimes happens in researches so deep, care ought to be taken to declare, that what is proposed, is only matter of conjecture, which it may be proper to admit till such time, as the truth can be discovered with positive certainty.

If these qualifications be necessary to every physician, who would maintain his character in the profession with honour, they are much more so to those who have the charge of teaching medicine: and above all, to such as undertake to write on this science, and publish their works.

I find myself, nevertheless, under both these circumstances. I have filled for several years the chairs of the professorship of physic at Toulouse, Montpelier, and Paris: and I have for a considerable time published medicinal works. It may be, therefore, reasonably concluded, that I have been long sensible of those obligations, which lie on me from both the titles of writer, and professor; and which I have not in any point neglected to fulfil.

I applied myself in my youth to anatomy, and acquired, at a very early age, the necessary qualifications, with regard to that branch of knowledge, for studying, and teaching medicine. A long course of practice has furnished me with the opportunity of informing myself of all the

facts, which commonly offer themſelves in the treatment of thoſe diſeaſes, *quæ ſunt quotidianæ occurſionis:* and which are the moſt important, and the moſt neceſſary part of medicine. I have, moreover, applied myſelf to learn the particulars of thoſe rare and ſingular caſes, which are not preſented to the view of every phyſician, *non omnibus omnia:* and to this end, I have conſulted many collections of remarks.

It is ſcarcely credible, how many ſuch caſes I have read, and how many obſervations I have examined: but however uſeful they may be in general, medicine begins to be overloaded with them, through the inutility or abſurdity of numbers of them. As nothing is more difficult than to obſerve well, nothing of courſe is more rare than a good obſervator. Nevertheleſs, all mankind believe themſelves capable of being ſo; and the moſt unqualified to perform it, are almoſt always the moſt forward to take this taſk upon them; and to publiſh their productions with the greateſt confidence.

I acknowledge it is not without being ſurfeited with them, that I have gone over ſo great a number of ſuch collections: and I queſtion whether Virgil was ever ſo much ſo in reading the verſes of Ennius. But we had both the ſame deſign: for I endeavoured, like him, to extract ſomething uſeful from this heap of things, that contained ſo little of what was good; and this ſupported my patience.

The knowledge, of which there is the greateſt defect in the preſent ſtate of medicine, and which

is, nevertheleſs, the moſt eſſential to it, is what regards the efficacy of remedies propoſed for each diſeaſe. If we were to believe authors, who have written on this matter, there is no medicine whatever, that is not proper to cure many diſeaſes: but when, depending on their authority, we come to the trial, we find that the greateſt part will in reality cure none.

There is no room to hope, that medicine can be improved in this moſt uſeful light, but by obſervations on the effects of ſimple medicaments, repeated with the greateſt accuracy, by perſons the moſt intelligent, aſſiduous, and free from prejudice: and we ought not, therefore, to expect much aid in this point from phyſicians, who are employed by the public. Thoſe, who are moſt in vogue, frequently want the talents requiſite for making good obſervations; and frequently they want the leiſure. It is only under the authority of the king, or through his protection, there can be hopes of collecting a body of uſeful and certain obſervations, by entruſting the care of making them to perſons of learning and knowledge, and ſuch as are capable of judging without prejudice of the effects, of the medicines they are directed to try.

The encouragement, which his preſent majeſty gives to the advancement of the ſciences, has already lead him to ſend aſtronomers to the torrid and frigid zones, to meaſure the degrees of latitude. He has lately appointed others to go, one to the north, and another to the ſouth, to obſerve the tranſit of Venus over the diſk of the Sun.

Theſe undertakings are certainly worthy the munificence of a prince; but the deſign of rendering medicine more perfect; of aſcertaining the virtues of remedies; and of gaining lights into their true properties; ſo uſeful for the preſervation of his ſubjects, his auguſt family, and his ſacred perſon, is not leſs worthy his regard; and it is to be hoped, that he will eſtabliſh this project through his authority, as ſoon as it ſhall be preſented to his view.

In the mean time, I have done, with reſpect to this matter, all that can be hoped for from a private phyſician in the preſent ſtate of things. I have enumerated for every diſeaſe, the remedies the moſt certain, or the beſt vouched. I have pointed out thoſe, which have appeared to me dubious, although recommended by ſome other phyſicians. I have even introduced many ſingular remedies, which authors have propoſed: and if I have taken the liberty of declaring my ſentiments of them, it is leſs with deſign to condemn, than to render them objects of attention, in order to their being tried when opportunities offer.

As I have long taught, at the Royal College, the contents of this treatiſe, at ſeveral repeated times, according to the new courſes of lectures on diſeaſes, which I have begun, ſomewhat of the plan I follow, and the ſyſtem I propoſe in this work, has been already ſeen.

The zeal of pupils for their teachers, and the eagerneſs with which they publiſh, even unknown

known to them, what they have learnt, are very apparent to the world. I have experienced it myself in more than one manner; but most particularly with respect to this treatise.

In 1740, Mr. Messence, at present doctor regent of the faculty of Paris; and at that time a student in physic; presented me with a *thesis*, he had formed from the lectures which I then read; and with relation to which, he desired some explanation of me, that I gave him with pleasure. This *thesis* was maintained in the physic-school, in the beginning of the year 1741, by Mr. Arragon, who was then obtaining his licence: and who formed it, also, under this title, *Utrùm à mutuo sanguiferorum, lactiferorumque uteri vasorum nisu menstrua purgatio?* After having exhibited the mechanism of the menstrual flux, in the manner it will be found in this work, *Book I. Chapter I, II, and III,* the affirmative was concluded.

About the same time nearly, an English physician, whom I know, only by the initial letters *J. R—n*, by which he signed himself, in the title page of his book, attended at these lectures; and took advantage of what he could retain of them himself, and of what other pupils could collect in the same manner. On his return to England, he printed this collection in English, at London, in 1743, in *octavo*, under the name of *A Treatise on all the Diseases incident to Women:* where, in the title page, he declares, that this treatise is taken from my lectures; as he affirms more explicitly in the preface, in which,

which, he gives me commendations, I ſhould think myſelf very happy to merit.

I mention theſe two facts, to ſhow, that as early as the time mentioned, the lectures I read were judged to be productive of ſome good: and I may be eaſily pardoned this kind of vanity; ſince it is the only recompence of all my trouble. It is indeed a great matter of exultation to me, who never propoſed any other end in my ſtudies, than that of rendering myſelf ſerviceable; who never endeavoured to obtain knowledge, but with the view of imparting it to others, *aliquid diſcere ut docerem:* and who, as I have remarked, in the title page of this work, never ſet any value on diſcoveries, however ſingular, if I could not communicate them: *quem nulla res delectabit, licet eximia ſit, & ſalutaris, quam mihi uni ſciturus ſim.*

As I have compoſed the preſent work with this diſpoſition of mind, it may be juſtly preſumed, that I have neither concealed, nor forged any thing. I have every where delivered the truth ſolely, as far as I was informed of it; and I have, to the utmoſt of my abilities, propoſed thoſe remedies for every diſeaſe, which are moſt ſafe, moſt uſed, and moſt efficacious. I have omitted, or exploded ſuch medicines, as appeared to me trivial, and ſuperſtitious; or which I know to be of no avail. When the authority of any celebrated phyſician obliged me to mention any remedy that appeared doubtful, or hazardous, I have taken care to give ſome intimation of it: but with that caution, which was proper with regard

regard to the reputation of the perſon who propoſed it.

However great may be the number of treatiſes there are on the diſeaſes of women, I have, nevertheleſs, found the ſubject every where immethodically diſcuſſed, and little explained, either with reſpect to theory, or practice. No body has yet thought of founding the theory on the true ſtructure of the *uterus*, and the mechaniſm of the functions proper to that part: and, as to the practice, nothing more has been in general attempted, than to copy ſervilely; or where any have made deviations, from a practice that appeared to be vain, it ſeems as if they did it only to indulge their own imagination in the choice of the medicines, they have ſelected, without any relation to the certain indications, which the nature of the diſeaſes preſented.

As I was aware of theſe defects; I have endeavoured to remedy them: and believe I have not attempted it in vain, with regard to the theory. I ſhould eſteem myſelf very happy, if I could flatter myſelf with the ſame ſucceſs, in relation to the practice. But, as I have ſaid before, the uncertainty of the *Materia Medica*; the ſmall number of peculiar remedies that it furniſhes; and the ſmall degree of faith that ought to be placed in thoſe which are moſt extolled; have given me little room to propoſe new methods: and much leſs to offer ſuch as were very certain.

I ſhall

I ſhall be well ſatisfied, however, if, by means of declaring the poverty, and uncertainty, that attend us in this article, I could attain to the making it be ſenſibly perceived, how great a need we have of an efficacious ſuccour.

I will conclude with ſome reflections.

I. I have, in the preface to the Treatiſe on tumours, cenſured the uſe of forms, already compoſed in the books which treat of medicine. I retain yet the ſame opinion; and, on that account, I have not inſerted any of thoſe ſtandard forms in this work. The ignorant, and the half learned, ſeldom omit to employ ſuch without diſtinction of age, conſtitution, or the ſtrength of the patients; and conſequently employ them almoſt always to an ill purpoſe.

II. I have not contented myſelf with enumerating, in detail, the ſimple medicines proper to anſwer to the different indications, which diſeaſes preſent; and to note the doſes: but I have done more, I have pointed out the means of compoſing the different general forms of remedies, under what particular ſpecies of form of preſcription may be thought proper, by proportioning them to the circumſtances of the diſeaſe, or ſtate of the patient.

III. In compoſing theſe particular forms, I exhort every body to render them as little charged with a multiplicity of ingredients as they can. I know the fondeſs that ſome phyſicians have for heaping into the ſame preſcription, a great number of

of ingredients, often of a contrary nature to each other. But, beſides that this tends to ſurfeit the ſtomach of the patient, it prevents, moreover, the being able to diſtinguiſh which, of the number of the medicaments it is, that really operates ſucceſsfully; and of which it may be proper to continue the uſe.

IV. As the doſes, I have noted, are moderate, I believe they may be given to adult women without any danger: at leaſt, if they are not very delicate in their conſtitution, nor have their ſtrength greatly impaired. Perhaps, it may be proper to augment them in the repetition, in proportion to the continuance of their uſe. But it is much better to increaſe the doſe of a medicine, which is not found ſufficiently powerful, than to be obliged to diminiſh it on account of its too great operation.

V. The deſire of rendering this work ſerviceable, has induced me to write in French, to place it within the reach of all perſons. This gave me ſome embarraſſment, when I had occaſion to ſpeak on certain ſubjects: but I have been careful to employ ſuch expreſſions only, as have nothing offenſive in them.

VI. I believed it proper to add, at the end of this work, a Chronological Catalogue of the authors, who have written on the diſeaſes of women: and there were two reaſons, which engaged me to do it. The one to inform young phyſicians of the antiquity of their profeſſion, and the names of ſeveral of the greateſt men who

who have ſucceſſively laboured to extend and explain it. The other, to make them ſenſible, that this ſcience, which is accuſed of fluctuation, has always proceeded on the ſame fundamental principles, from which it has never deviated; notwithſtanding the variations which vanity, intereſt, caprice, and faſhion, might introduce on this ſcore, that had nothing eſſential in them.

VIII. It may be perceived, that this work is not yet compleat. There wants a third book on *pregnancy*, and the *diſeaſes incident to it*, to which I have referred in more than one place. I hope to give it ſoon: and it makes a fifth volume, which will be ſold ſeparately.

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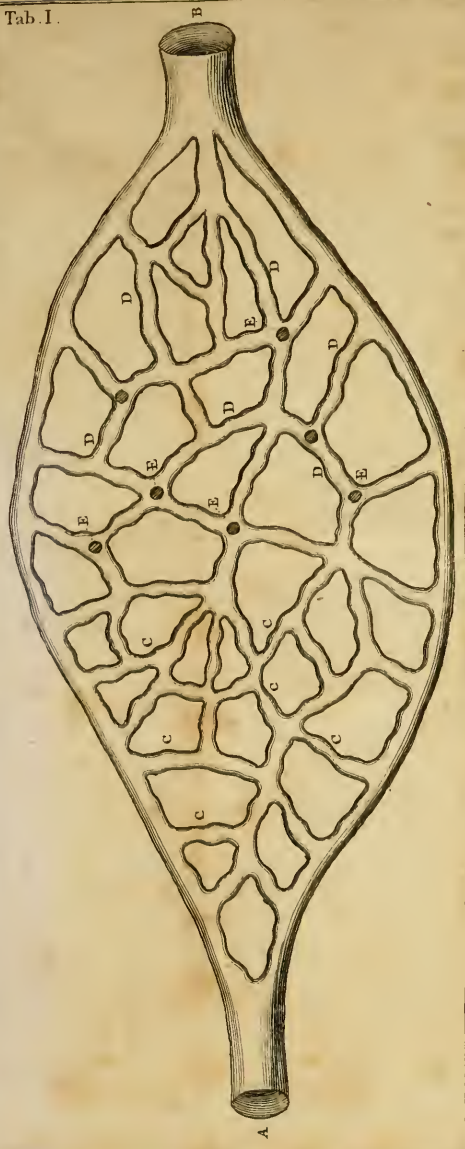

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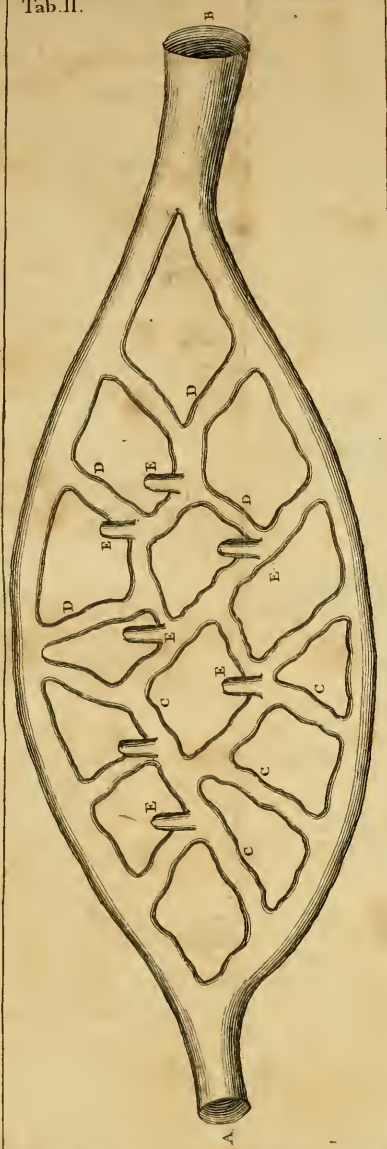

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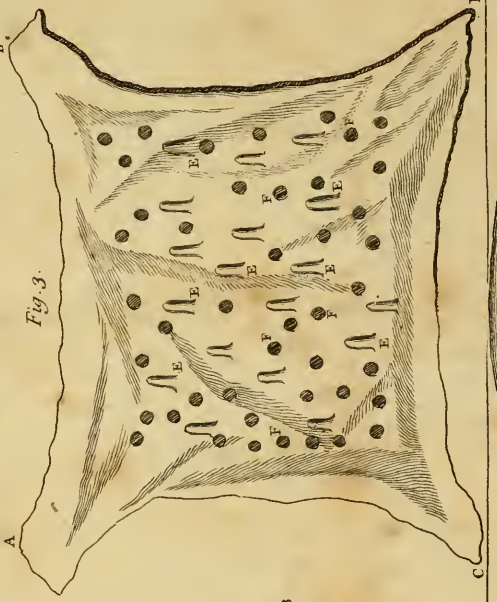

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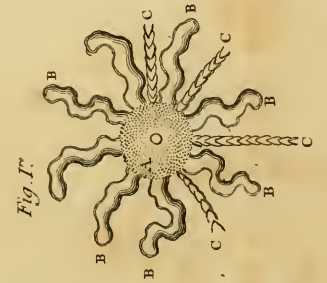
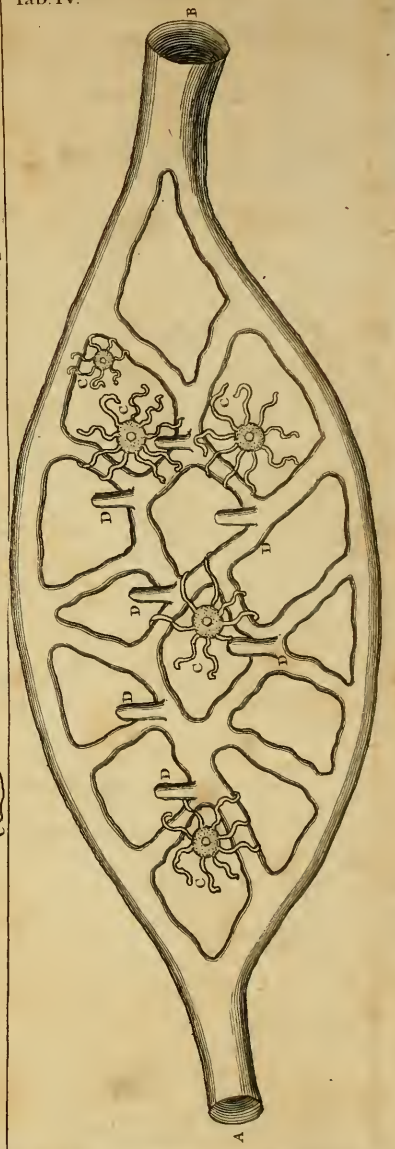


Tab. IV.



EXPLANATION of the Figures which represent the interior Structure of the *Uterus*.

THOUGH these figures have been taken from the uterus *of a woman who died in the ninth month of her pregnancy, where the blood-vessels and lactiferous vessels were very much dilated; it has been thought proper, nevertheless, in order to render them more distinguishable, to enlarge them to more than double the real magnitude.*

All the figures represent the internal surface of the uterus: *for it is only on that side, the veinous* appendices *are visible: but the interior coat of the* uterus *is supposed here to be transparent, and suffer the lactiferous vessels, which are in it, on the side which adheres to the muscular coat, to be seen through it; without which, it would have been unavoidable to have doubled all the figures.*

TABLE I.

The figure in this table represents the distribution of the blood-vessels, as well arteries as veins, on the surface of the internal membrane of the *uterus*; and shews the manner of the circulation of the blood in it.

A. A branch of an artery.

B. A branch of a vein.

CCCC. Capillary ramifications of the branch of an artery A, which inosculate, and communicate with each other, by several intermediate branches; and terminate at the ramifications of veins, which correspond to them.

DDDD. Capillary ramifications of veins, which, after having received the blood from the capillary ramifications, of the arteries, to which they are continuous, communicate with each other by several intermediate branches; and terminate, at last, in the veinous branch B.

These ramifications of arteries, and veins, form by their *anastomoses*, a kind of net-work.

EEEE. Circular holes placed at the points of union of two or three of the ramifications of the arteries and veins; from whence arise the veinous *appendices*, which are described in the next table.

TABLE II.

The figure in this table is the same as that in the preceding, with the addition of the veinous *appendices*.

A. A branch of an artery.

B. A branch of a vein.

CCCC. Capillary arterial ramifications of the branch A; which, after having communicated with each other by intermediate branches, pass on to terminate in capillarations of veins.

DDDD. Capillary veinous ramifications, which spring from the capillary ramifications of arteries; and which, after having communicated with each other by several intermediate branches, form, by their union, the veinous branch B.

EEEE. Veinous *appendices*, or small ends of veins placed in the point of union of several branches, or ramifications of arteries, or veins, open on one side into the cavity of the vessel, in which they are placed, and closed on the other. These *appendices* pierce the internal coat; and pass into the cavity of the *uterus*, into which they open in the time of the *menses*.

TABLE III.

Figure I.

This figure represents one of the clues of the lactiferous vessels, designed to separate the uterine milk for the purposes explained, *Book I, Chapters I, II, and III.*

A. A *vesicula*, that is situated in the center of each clue; into the cavity of which, pass nine or ten vermicular vessels, of the length of two, three, or four lines, that deposit there the milky humour. The cavity of each of these *vesiculæ* communicate with that of the *uterus*, by a small excretory duct, which pierces the internal coat of the *uterus*; and discharges into it, at certain times, the milk with which the *vesiculæ* are filled.

BBB. Vermicular lactiferous vessels, that convey into the *vesicula* A, the milk, or milky humour, which they have secreted.

CCCC. Capillary lymphatic vessels, which spring from the *vesicula*; and which emit the most liquid part into the milk, or milky humour, that is collected there, to carry it into the larger lymphatic vessels.

Figure

Figure II.

This figure repreſents a clue of the lactiferous veſſels, ſuch as that of the preceding figure, with this difference only, that here the vermicular lactiferous veſſels are winding, as they are naturally: whereas, in Figure I, they are placed at greater diſtances, and extended to render them more apparent.

A. A *veſicula*, or center of a clue.

BBB. Vermicular lactiferous veſſels, winding, and cloſe to each other, as they are naturally.

Figure III.

This figure repreſents a portion of the internal coat of the *uterus*, ſeen on the ſide next the cavity of it.

ABCD. A portion of the internal coat of the *uterus*, ſeen on the ſide of the cavity of the *uterus*.

EEE. The veinous *appendices*, deſcribed in *Table II*, as they paſs into the *uterus*, near the end of the time of pregnancy. They paſs much leſs far into it, in the time of the *menſes*: and, at others, ſcarcely at all.

TABLE IV.

In the figure of this table are repreſented, the diſtribution, and circulation of the blood, in the net-work of the capillary ramifications of arteries and veins; ſuch as were explained above, *Table I.*

A. Branch of an artery.

B. Branch of a vein.

DDD. Lactiferous veſſels riſing from the points, where the ramifications of arteries and veins meet.

CCC. Lactiferous veſſels applied to the capillary ramifications of veins, where they wind about for the purpoſes explained, *Book I, Chapters I, II, and III.*

It muſt be remarked, that this figure ſhews the internal ſurface of the coat of the *uterus*, on the ſide of the cavity of it, into which the *appendices* paſs, as has been ſaid. It has been thought proper, to repreſent here the lactiferous veſſels; which can, nevertheleſs, be ſeen only on the other ſide of this coat, as has been before mentioned. But if this coat be ſuppoſed to be tranſparent; and, by that means, the veinous *appendices*, and lactiferous veſſels, ſeen at the ſame time; it affords a better opportunity of judging of their relation to each other.

ADVER-

ADVERTISEMENT.

TO prevent miſtakes, which might be attended with very conſiderable inconveniencies, it ſeems proper to remark, as a cautionary intimation, that the compound remedies, mentioned in this work, where the contrary is not expreſsly ſpecified, are ſuppoſed to be prepared according to the *Pharmacopeia* of the Faculty of Paris; and, conſequently, vary greatly, as well in the kind, as the proportion of the moſt powerful ingredients, from thoſe which are in uſe with us, under the ſame denominations.

TREATISE

ON THE

Diſeaſes of Women.

BOOK THE FIRST.

Of the diſeaſes of women cauſed by the *menſes*.

CHAPTER THE FIRST.

Of the ſtructure of the uterus; *of its veinous* appendices; *and its vermicular veſſels.*

§. I. General Description of the *Uterus*.

I DO not propoſe here to give an accurate and particular deſcription of the *uterus*; as that would be digreſſing from my ſubject, without any reaſon. I take it for granted, my readers are already informed, either by the inſpection of dead bodies, or by the reading books of anatomy, of whatever is known of the ſituation, figure, ſize, members, connections, paſſages, blood-veſſels, lymphatics, nerves, and coats of this part; and conſequently underſtand;

1°. That the *uterus* lies betwixt the bladder and the *rectum*; and is contained in the *pelvis*, that is to ſay, in the inferior cavity of the *abdomen*, formed

by the *ossa innominata* and *os sacrum*, above which it does not reach, unless in the time of pregnancy.

2°. That it has the figure of a pear with its point turned downwards, a little flattish before and behind in virgins, but almost spherical in women that have had a child.

3°. That it is scarcely two inches broad from the right to the left, one inch thick from before to behind, and three inches high from the top to the bottom, in women who have not borne children: but somewhat bigger in those who have.

4°. That the cavity, which it incloses, can hardly contain an almond even in adults, when they are not pregnant; although, at that time, it dilates itself enough to hold a child, and sometimes two.

5°. That they distinguish in the *uterus*, the *superior* and *posterior* part, where it is the broadest, called the *fundus*; and the *inferior* and *anterior* part, where it is narrowest, called the *neck*.

6°. That the neck of the *uterus* is connected, by the expansion of the *peritonæum* which covers it, to the bladder, and the *os pubis* before; to the *rectum*, and the *os sacrum* behind; and to the *os ilium* by the sides.

7°. That the *fundus* is fixt on the two sides by four ligaments: two of which are called the *broad ligaments*, or *morsus diaboli*, which spring from the posterior part of the *uterus*, and connect, and sustain, the *ovaria*, and the *cornua*; and which are, properly speaking, only a simple expansion of the *peritonæum*: the other two are called the *round ligaments*; which take their rise from the lateral parts of the *uterus*, towards the places, where the *cornua* join it; and, being again covered by a production of the *peritonæum*, pass by the rings of the abdominal muscles, and proceed to their termination without on the *os pubis*.

8°. That the inferior part, or neck, of the *uterus*, projects into the *vagina*, which admits part of it into its own cavity; and that, at the end of a kind of snout,

ſnout, which it forms there, is a croſs ſlit, known by the name of the orifice of the *uterus*, by which the *vagina* communicate with the *uterus*.

9°. That the *fundus*, or ſuperior part, of the *uterus*, is pierced laterally, at the right and left, by the two *cornua* or *Fallopian* tubes, which open into its cavity, for uſes, that will be explained below.

10°. That the *uterus* receives arteries from different trunks; as from the ſpermatic, the hypogaſtric, and even the interior hæmorrhoidal arteries, according to its different parts, ſuperior, middle, and inferior; and that for the ſame reaſon, its veins join to different trunks, ſuch as the ſpermatic, the hypogaſtric, and the inferior hæmorrhoidal veins.

11°. That there riſe from the body of the *uterus*, a great number of lymphatic veſſels, almoſt all which ſpend themſelves in the conglobate glands, lying betwixt the bifurcation of the *aorta deſcendens*; from whence the lymph is afterwards conveyed into the conglobate glands of the meſentery, and thence into the receptacle of *Pecquet*, according to the courſe of the circulation of the lymph.

12°. That the *uterus* receives many nervous filaments, from the extremities of the intercoſtal nerves; and the pairs of the *medulla ſpinalis*, which come out between the *vertebræ* of the loins, or through the perforations of the *os pubis*.

13°. Laſtly, that the *uterus* is formed of three diſtinct coats: that the firſt, or exterior, is only a ſimple production of the *peritonæum*, which covers the outſide of the *fundus*, and the ſides of the *uterus*, and which by folding back has ſome ſhare in its ligation with the neighbouring parts. That the ſecond is carnous and muſcular, furniſhed with many circular, ſpiral, longitudinal, tranſverſe, and oblique fibres, which interſect each other in different directions; and which make the principal part of the ſubſtance of the *uterus*. That the third, the leaſt of all, is nervous, or rather tendinous, conſiderably uneven on the ſide where it is conjoined with the fleſhy coat, but ſmooth and even

on the other, except towards the orifice of the *uterus*, where may be ſeen many oblique tranſverſe *rugæ*, amongſt which are found a pretty great number of little ſpherical veſſels, full of a viſcid lymph; which a phyſician of Leipſic (Martin Naboth) has imagined to be the true *ova*, deſigned for the formation of the *fœtus*.

§. II. *Particular deſcription of the blood-veſſels of the* uterus.

To the knowledge of theſe general matters, there need only be added, that of two facts, leſs underſtood, but more important; of which I conceive it will be neceſſary to give a circumſtantial detail. The one regards the diſtribution, and conformation of the blood-veſſels, which creep betwixt the middle, and the internal coats of the *uterus*; and the other reſpects the ſtructure of the particular veſſels, that are found betwixt the ſame coats, and have the office of ſtrainers; and the nature of the humour ſeparated by them.

The uterine arteries, when they come near the *uterus*, divide, and ſubdivide themſelves into ſeveral branches; and, in conſequence of multiplying, and diminiſhing continually, become at laſt capillary ramifications; which make a great number of windings, and twiſt themſelves in a thouſand various forms on the ſeveral coats of the *uterus:* but ſeem particularly to be more copiouſly diſtributed, and to make a greater variety of windings, betwixt the muſcular and nervous coats.

Theſe arterial ramifications, in conſequence of ſubdividing themſelves, almoſt diſappear to the eye; but, if they be inſpected with attention, eſpecially after they are injected, it will be perceived, that every one terminates in a new canal, cylindrical, hollow, of a ſtructure nearly ſimilar, but a little thicker, and conſequently more perceptible; which are all ſo many firſt, or capillary, ramifications of uterine veins. Theſe

new ramifications make in the *uterus*, yet more windings, than the arterial ramifications: but, in doing this, they reunite little by little one with the other; and by these repeated reunions form branches thicker and thicker, which conjoin at last with the trunks of the uterine veins.

Besides this direct union of the veinous ramifications, which collects them into one common trunk, there are betwixt them, in the same manner as betwixt the arterial, an almost infinite number of communications, or lateral *anastomases*; which make these ramifications, when well injected, appear to form a kind of close net-work. By this means, the blood, which passes from the arteries into the veins, may turn to any side; and nature, in multiplying these communications, seems only to have intended to multiply the ways by which it may pass off.

Hitherto the distribution of the arteries and veins in the substance of the *uterus* has nothing different from that of the same vessels in the other parts of the body; or, at most, it only differs, in that, the vessels of the *uterus*, particularly the veins, make more windings and twistings; and the lateral *anastomases*, which maintain a mutual communication betwixt them, are there more numerous.

But what constitutes the most important difference, in the distribution of blood in the *uterus*, is, that, from each point of reunion of these veinous *anastomases*, at the place where the two vessels communicate with each other, and where the conflux of the blood is formed often, even in different places, along the veins, or their *anastomases*, there rises, perpendicularly, a little projection, or little *appendix* of a vein of the same size, which pierces the internal coat of the *uterus*, and terminates on its surface. These veinous *appendices* are only sensible in women who are pregnant, and only during the last months of their pregnancy: but it is then found, that they project into the *uterus* three or four lines, in the place where the *placenta* adheres to it; that by these projections

they ſink into, or, as it were, bury themſelves in proportionable hollows, or beds, which are formed in the ſubſtance of the *placenta*; that they conduce, by this means, to ſtrengthen the adheſion of the *placenta* to the *uterus*; and, moreover, that they emit through their extremities, which are open, the blood of the mother into the *cellulæ* of the *placenta*, from whence it is abſorbed by the umbilical veins, and conveyed to the *embryo*.

As in this ſtate, theſe *appendices* are pretty large, though not all equally ſo, they are not only perceptible to the eye, but even a probe moderately thick may be introduced, and paſſed, without difficulty, to the branches of the veins, whence they riſe, to aſcertain, by this means, the facts that have been advanced. But it is in vain, in all other ſtates of the *uterus*, to attempt to perform this: becauſe theſe *appendices* rediminiſh, in the ſame proportion, as the branches of the veins from whence they ſpring; and their minuteneſs renders them almoſt wholly inviſible, when the *uterus* has regained its ordinary magnitude.

I have before remarked, that theſe *appendices* open into the *placenta*, and there diſcharge the blood in the time of pregnancy. There is reaſon to believe, that they are open alſo in the time of the *menſes*; and that it is from thence the menſtrual blood comes. Excepting in theſe two caſes, they are perfectly cloſed on the ſide of the *uterus*, and, as their ſmallneſs does not permit us to perceive by what mechaniſm it is effected, we are at liberty to ſuppoſe, for this end, a kind of ſtoppel, or valve, which applies itſelf from without; or, what appears more plauſible, to admit, the extremity may be cloſed by the ſimple elaſticity of the fibres alone, or, otherwiſe, by the ſimple contraction of the circular fibres, which ſurround it.

It is apparent, according to any ſuppoſition with reſpect to this conformation, the blood cannot flow out through theſe *appendices*, except in the times of pregnancy

pregnancy, or menſtruation. At all others, that which enters muſt ſtagnate; or, what is more probable, and more conformable to the laws of circulation, muſt be renewed, but very ſlowly, and by a continuation of the direct circulation which is made in the vein, and which communicates, by minute degrees, even with the cavity of the lateral *appendix*; much in the ſame manner, as the ſtream of water in a river communicates with the hollow pits of the banks, and renews the water gradually in them.

§. III. *Particular deſcription of the lactiferous, or vermicular, veſſels of the* uterus.

There is found, under the ſame internal coat of the *uterus*, another kind of veſſels, that cannot, any more than the veinous *appendices*, be diſtinguiſhed, except in the laſt months of pregnancy; but which may be eaſily enough perceived by the eye at that time.

1°. There is nothing more required, in order to this, than to turn the *uterus* of a woman dead in the laſt month of her pregnancy, or in labour, inſide outwards; and, after having ſlightly wiped it in the parts, where the *placenta* does not adhere to it, and where the coat is pretty even, to ſqueeze it gently, by compreſſing it on the under ſide, where an infinity of drops will be ſeen to run out through holes, or pores, almoſt imperceptible; which muſt, nevertheleſs, be the mouths of ſo many veſſels, intended to ſeparate this humour.

2°. But if, after having let the ſame *uterus* macerate ſome hours in vinegar, it be ſtript of the internal coat, by tearing it dexterouſly, there will then be rendered viſible, an infinite number of little veſſels; vermicular; white; thicker than ſtrong raw ſilk; three, four, or five lines, in length; and full of a milky liquor, which flows out of them when they are prickt, or torn; and which is the ſame as is ſeen to run out of the *uterus* in the preceding experiment.

These vessels are interwoven, in a thousand different manners, with the veinous ramifications, that will be presently described; and with the *anastomases*, or lateral communications, which conjoin them. Sometimes they creep near them in a parallel direction: sometimes they cross them above or below, at right, or oblique, angles: sometimes they embrace them; and in winding, twist themselves around them. In all these various positions, they seem closely connected with veinous ramifications; and they form, together with them, the pulpy substance, that is betwixt the middle and internal coats of the *uterus*.

If any person have the patience to dissect, or rather to unravel, these vessels with the point of a needle, it will be found, that they may be separated into different *fasciculi*, each of four or five vessels; that in each of the *fasciculi*, the vessels, which compose it, reunite themselves at the end, where is pretty frequently found, a kind of dilatation, or of bag, which serves as the common reservoir of this *fasciculus:* and it is in this point of reunion, that they pierce the internal coat which covers them, in order to open themselves into the *uterus*; and to pour into it, through as many excretory pores, the milky humour they contain.

As to the other extremity of these vessels; it appears to be perfectly closed: and it is so in reality. But this does not prevent, nevertheless, these vessels from being pierced both at this end, and in their whole extension, by many capillary ramifications of lymphatic vessels; which absorb the liquor contained in their cavities, when it is thin and subtle enough to insinuate itself into their orifices: or which, at least, when it is too thick to be capable of passing intirely, strain from it the more liquid and fine parts.

It cannot be doubted, but that these vessels serve in the time of utero-gestation, to separate from the blood, a milky liquor; nearly in the same manner as the spermatic, which form the testicles of men, sepa-

ſeparate the *ſemen*. It is equally apparent, that, when they are full, they convey it into the *uterus*, to ſerve for the nouriſhment of the *embryo*; as we ſhall have occaſion to explain more fully below.

It is not to be concluded with the ſame certainty, what uſes thoſe veſſels may be of in women not pregnant; nor of what kind of humour, they then become the ſtrainers. It is meerly the ſubject of conjecture: but the known œconomy of the human body; and the compariſon of the breaſts, which have ſo evident an analogy with the *uterus*, give us a right to preſume, that the humour, which theſe veſſels ſeparate in the *uterus*, ſhould be of the ſame nature with that of the *veſiculæ* of the breaſts; and that it ſhould undergo ſucceſſively the ſame alterations; which muſt produce the ſame changes in the breaſts, and in the *uterus*; and make that ſympathetic relation, that ſubſiſts betwixt thoſe parts.

In young girls, till the age of fourteen years, the humour of the *uterus*, in the ſame manner as that of the breaſts, is only pure lymph; or, at moſt, lymph mixt with a ſmall quantity of chylous parts. As theſe humours are conſequently very fluid, the lymphatic veſſels of the *uterus*, and the breaſts, may evacuate them from their reſervoirs, as faſt as they come there. For which reaſons, there is nothing then, that can dilate either the veſſels of the breaſts, or the vermicular veſſels of the *uterus*; and during that time, the breaſts conſequently remain ſmall and flat; and the *uterus* hard, cloſe, and compact.

But about the fourteenth year of age, as the increaſe of the body begins to be more ſlow in girls, the conſumption of blood, and conſequently of chyle which forms it, becomes alſo leſs. Whence there is then more chyle than is requiſite for the nouriſhment of the body; and the ſurplus mixes by degrees with the lymph of the breaſt and *uterus*, with which it has already ſome analogy; and renders this lymph from day to day more milky. Thus theſe two humours, becoming more thick, find a more difficult paſſage

in

in the lymphatic veſſels deſigned to take them up again; remain longer in the reſervoirs that contain them; dilate theſe veſſels, and ſwell them more and more by accumulating there; and occaſion thence the boſom to grow bigger, the breaſts to be formed, and the *uterus* to be extended, dilated, and inlarged; which conſtitutes puberty in women; and renders them fit to be married, *viro maturas*.

Theſe changes become yet greater after conception. Then, for reaſons below explained, the chyle mixes much more abundantly with theſe humours; finiſhes at laſt to render intirely milky; and by that deprives them of the power of penetrating into the lymphatic veſſels, at leaſt with reſpect to ſuch part of them as is of a thicker conſiſtence, which occaſions, that, by means of accumulating in their reſervoirs, they diſtend them more and more; and dilate in proportion the ſubſtance of the *uterus* and the breaſts. In conſequence of dilating their reſervoirs, they alſo open the excretory ducts of them, and procure themſelves a paſſage out; the one into the *uterus* for the nouriſhment of the *fœtus* during pregnancy; and the other, by the extremities of the breaſt, to feed the child after it is born.

It is eaſy to collect from thence, that the vermicular veſſels in the *uterus* muſt not be expected to be found in women who are not pregnant: ſince, even if their minuteneſs did not render them imperceptible, the colour, and tranſparency of the humour they contain, would be ſufficient to render them indiſtinguiſhable. It has been before obſerved, that during ſuch time they are only full of a lymph, which partakes but little of a milky nature, and is almoſt tranſparent. For which reaſon, it would be very difficult to diſtinguiſh them from the veſſels purely lymphatic; or even from the ſimple fibrous filaments that connect the coats together.

To render more clearly intelligible, what has been ſaid, I have thought it proper, to add ſome figures, which exhibit to view the ſtructure of the *uterus*, according

cording to the deſcription I have given of it; which will be found at the beginning of this book.

CHAP. II.

Of the menſtrual flux, or menſes *of women.*

§. I. FACTS.

WOMEN, during a certain age, are ſubject to a periodical evacuation of blood, that is peculiar to them; and which comes from the *uterus.* This evacuation is ſo general, that there is ſcarcely found one woman in a hundred, in whom it is wanting, unleſs when ill, or pregnant.

I. The firſt marks of this evacuation appear commonly in girls towards the fourteenth or fifteenth year of their age. There are, however, many inſtances of thoſe, in whom it begins ſooner; and of others, in whom it happens later.

II. This evacuation, having taken place, returns once every month, according to the common courſe; but there are, nevertheleſs, girls, who, without being ill, have the *menſes* naturally twice every month; or, at leaſt, three times in two months.

III. Hence the returns of the *menſes* are found to be ordinarily regulated by the revolution of one month: but this, nevertheleſs, admits of frequent variations: for many women have them every twenty-ſeventh or twenty-eighth day; and others have them only once in five weeks.

IV. The duration of this evacuation is pretty variable: but it is, nevertheleſs, rare, that it does not laſt for three days, or ceaſe before the end of ſix: and it is conſidered generally as a diſeaſe, when the *menſes* continue leſs than three days, or more than ſix.

V. There

V. There are three diviſions of time commonly diſtinguiſhed in the flowing of the *menſes:* the beginning, and increaſe; the continuance in the greateſt degree; and the diminution, and intire ceſſation: which are nearly equal intervals of time; and more or leſs long in proportion to the whole duration of the flux. It is not often ſeen in the order of nature, that the *menſes* begin or end ſuddenly.

VI. It is difficult to aſcertain the quantity of blood, that is evacuated each time: for it varies in each ſubject; and often even at each return in the ſame ſubject.

Commonly theſe variations are limited to eight ounces for the leaſt, and ſixteen for the greateſt evacuation. Though there are ſome women who loſe leſs, and others who loſe more, without being ill.

VII. The *menſes* obſerve a certain proportion, for the moſt part regular, betwixt the progreſſes of their beginning; and the diminutions of their end. But there are women, nevertheleſs, in whom the increaſe is more rapid than the declenſion; and others, in whom the decreaſe is more quick than the augmentation.

VIII. Moſt generally there is a conſiderable uniformity in the duration, and the quantity, at each return of the *menſes.* But it is, however, obſerved, that there are women, in whom the *menſes* are alternately from month to month, more or leſs abundant; and continue a longer or ſhorter time.

IX. However common it may be, that the *menſes* flow without any interruption from the beginning to the end, and do not re-appear again after they have once ceaſed, there may be found inſtances of women, in whom, after having flowed for ſome days, they ſtop of themſelves; but come again two or three days after, flowing afreſh for ſome time.

X. The blood which is diſcharged in the *menſes* is of itſelf laudable and good in the women who are themſelves in health, and of a good conſtitution.

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Whatever is ſaid of its acrimony, and contagious quality, ought only to be underſtood of the menſtrual blood of women, who are diſeaſed; and in whom it is before depraved; or who have ulcers in the *uterus*, which infect it; or in whom, at leaſt, the menſtrual blood corrupts in the *uterus*, by being detained there. But even, in theſe three caſes, there is yet much to be abated of the bad effects, which are attributed to the blood of the *menſes*.

XI. The menſtrual evacuation is generally preceded and ſucceeded by ſome lymphous diſcharge; which comes before, or follows after, for a greater or leſs length of time; and which is more or leſs abundant, according to the conſtitution of the women, and the ſtate of the *uterus*. There are, nevertheleſs, many healthful women of good conſtitutions, in whom no diſcharge of this kind is found, either before or after the *menſes*.

XII. The *menſes* are wanting in the ſtate of pregnancy; eſpecially in the laſt months: for they ſometimes do continue in the three firſt. They are alſo wanting in moſt women who give ſuck: as likewiſe in ſome who work hard, or in ſome country girls; among whom there are inſtances of ſuch as never have the *menſes*, and yet never receive any inconvenience on that account.

XIII. The approach of the *menſes* is commonly ſhewn by pain in the *pubis*; groins; kidneys, or rather loins; &c: by the ſwelling of the lips of the *vulva*, or of ſome pimples on them: by the tenſion, heat, and ſenſibility, of the *vagina:* by piles internally or externally: by the frequent wanting to make water, and heat of urine, and the thickneſs of it when diſcharged; or its tendency to be turbid and grow thick on cooling: by the tenſion and ſwelling of the breaſts: by frequent ſhortneſſes of breath: by diſorders of the head, either heavineſs or ſhootings: by drowſineſs, or want of ſleep: by frightful dreams, and waking in ſtarts: &c. But it is ſeldom that theſe accidents are perceived above four or five days before the

the coming on of the *menſes*; and generally they precede it only one or two days.

XIV. To conclude, this evacuation continues in the ſame order, and with the ſame periods, to the age of forty, forty-five, and fifty years, when it ceaſes of itſelf. As the beginning of it is variable in different women, the ceſſation is ſo alſo: and it takes place ſooner or later, according to the natural diſpoſition, and the kind of life of the women; the diſeaſes which they have had; and the climates where they have lived.

§. II. CAUSES.

I. The firſt queſtion which ariſes in the explanation of the cauſes of menſtruation, regards the place whence the *menſes* flow: whether it be from the cavity of the *uterus* itſelf, or only from that of the *vagina*. Authorities; and what are yet more prevalent, obſervations; are alledged in ſupport of each opinion: but the obſervations which are urged to prove, that the blood of the *menſes* comes from the cavity of the *uterus*, are ſo deciſive, and have been made by obſervers ſo intelligent, that the determining on this queſtion by them can admit of no heſitation.

1°. Veſalus [1], Peyer [2], Mauriceau [3], Littre [4], and Schurig [5], affirm to have ſeen the *menſes* flow from the orifice of the *uterus* in women, who afforded an opportunity of aſcertaining the fact, becauſe they had a *deſcenſus* of the whole body of the *uterus*, even to the extremity of the *vulva*. The two laſt add, that there did not flow one ſingle drop of blood from the *vagina*; of which it was eaſy to ſee the whole circumference.

2°. Spigelius [6] remarks, "that in women who die in "the time of their *menſes*, the internal coat of the *ute-*

[1] *De humani corporis fabricâ.* Lib. v. cap. 15.

[2] *In ephemerid. Germanic.* Dec. ii. ann. 1. Obſervat. 84.

[3] *Obſervations ſur la groſſeſſe.* Obſervat. 96.

[4] *Hiſtoire de l'Académie Royale des Sciences.* Année 1720. pag. 16.

[5] *Parthenologiæ*, ſect. ii. cap. 2. §. 4.

[6] *De humani corporis fabricâ.* Lib. viii. cap. 20.

"*rus*

" *rus* is found perforated, especially towards the *fun-*
" *dus*, with a great number of holes; which are then
" very perceptible: but that they are scarcely to be dis-
" tinguished at any other time. He adds, that it is
" through these holes the blood of the *menses* makes
" its passage out."

3°. Mauriceau [1] assures us, that *he found in the dissection of a woman, who had been hanged as a convict in the time she had actually her* menses, *all the cavity of the* fundus *of the* uterus *spread with little grumes of coagulated blood, and the vessels of it much larger than those of the neck; and even full of this coagulated blood towards the orifices which discharge themselves into the* fundus: *which he says he several times met with in the dissection of the bodies of other women in a similar state:* and this he repeats nearly in the same terms [2] in another of his works.

4°. Littre [3] has observed also *in women who died in the time of their* menses, *that the* uterus *was large and distended; that its blood vessels overflowed with blood; that there was even some discharged into its cavity; and that its internal surface was all spread over with holes, very perceptible, and full of blood; from whence, on pressing the body of the* uterus, *from without inwards, the blood was made to flow.*

5°. Morgagni [4], moreover, has found in the same manner, " in all the observations he has made on
" women, who died during the time of their *menses*,
" or a few days after having had them, that the *fun-*
" *dus* of the *uterus* was marked with a great number
" of bloody spots; but that there appeared nothing
" like it in the *vagina*." Which he repeats in another place [5]; and supports with the testimony of Santorini, and of all those who have attended his lectures.

[1] *Des Maladies des Femmes grosses & accouchées.* Liv. i. chap. 10.

[2] *Observations sur la grossesse.* Observat. 49.

[3] *Histoire de l'Académie Royale des Sciences.* Ann. 1720. pag. 16.

[4] *Adversaria Anatomica.* Adverf. i. §. 33.

[5] Adverf. iv. §. 27.

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Such ſtrong proofs of the fact can hardly be contradicted; and, at leaſt without being very much prejudiced, one cannot avoid granting, that it is from the cavity of the *uterus*, and not from that of the *vagina*, the blood of the *menſes* flows. This opinion is, moreover, greatly compatible with the known uſes of the *uterus:* and even from thence is extremely plauſible. 1ſt, It is in the *uterus*, that the blood-veſſels are diſpoſed in the greateſt number; and it is therefore from thence the menſtrual blood ſhould flow. 2dly, Every thing evinces, as we ſhall ſee below, that the menſtrul blood muſt ſerve during pregnancy to nouriſh the *fœtus* in the *uterus:* and it is, therefore, the *uterus* that muſt ſupply it. 3dly, It appears that the *lochia* flow after delivery from the ſame veſſels from whence the *menſes* flow at the time women are not pregnant: but the *lochia* flow from the veſſels of the *uterus*; therefore the menſtrual blood alſo muſt flow from theſe veſſels. 4thly, To conclude, floodings have been always regarded, and with reaſon, as a certain ſign of an approaching miſcarriage. They come, therefore, from the *uterus:* for what injury could they do the *fœtus*, if they came from the *vagina?* Thus every thing confirms what theſe obſervations teach of the origin of the blood of the *menſes*.

It is not, however, to be denied, but that the *menſes* often come from the cavity of the *vagina*, at the ſame time as from that of the *uterus*. There is too much reſemblance in the ſtructure of theſe two parts, too much conformity in the diſtribution of the blood, and too much communication betwixt the veſſels which ſupply them with it; not to occaſion frequently, that the blood ſhould open paſſages in theſe two places at the ſame time, eſpecially in plethoric women. I believe even it may, and does happen ſometimes, that the *menſes* flow only from the *vagina* alone; when there is ſome cauſe which prevents them from flowing from the *uterus*. By this means it is eaſy to account for the obſervations [1] of thoſe, who aſſure

[1] Realdus Columbus. *Anatom.* Lib. vi.

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us, that in the diſſections they have had an opportunity of making on the bodies of women, who died during the time of their *menſes*, they have found the cavity of the *uterus* without any appearance, or ſign of blood: while, on the contrary, the *vagina* was filled with it. It may, by the ſame means, be explained alſo, how, in ſome women, the *menſes* may continue during the whole time of their pregnancy; as, in many others, they do continue, at leaſt, during the three firſt months, without producing a miſcarriage. To take away all the force of what they would deduce from theſe facts, let us only ſuppoſe, what is very apparent, *viz.* that the *menſes* come then in theſe women from the *vagina* only; without any neceſſity for the opening the mouth of the *uterus*; and, conſequently, without the leaſt alteration happening to the *uterus*.

II. As there are in the *uterus* two kinds of veſſels equally full of blood; arteries and veins; it becomes proper to decide another queſtion: to wit, from which of the two, the menſtrual blood, that comes from the *uterus*, flows; whether from the veins, or from the arteries? Opinions are divided on this point alſo: but it muſt be confeſſed, the greateſt number incline to believe that this blood comes from the veins; and, it is certain, every thing ſeems to countenance that notion. The colour of this blood is brown, and often black, ſuch as is that of the veins; the ſlowneſs with which it flows, drop by drop, is agreeable to the manner of that which comes from the veins; and what is beſides more concluſive yet, there is a certainty, that the veſſels, from whence the *lochia* flow in childbed women, are ramifications of veins; which determines the nature of the blood of the *lochia*; and, by a neceſſary inference, that of the blood of the *menſes:* which, as we already remarked, flows from the ſame veſſels, and is eſſentially the ſame.

III. There ſtill remains a third queſtion to be diſcuſſed: *viz.* from what place, and from what part of the veins of the *uterus*, the menſtrual blood flows? But this queſtion does not require much debate. The

knowledge of the ſtructure of the *uterus*, and of the diſtribution of its veſſels, ſuch as has been explained in the preceding chapter, ſuffices to enable us to judge, that it is from the *appendices* of the veins this blood muſt flow. They are, of all the veinous ramifications, thoſe which advance the fartheſt into the cavity of the *uterus*; they are thoſe alone which penetrate through the thickneſs of the interior coat; and they are a kind of ends of veins, which muſt be intended for ſome purpoſe in the deſign of nature; and which, nevertheleſs, do not ſerve for any in the ordinary courſe of the circulation. They are actually ends of veins ſimply gathered at their extremities; and thence very proper to unfold themſelves, and to open without laceration. All theſe facts eſtabliſh ſuch a preſumption, as obliges us to conjecture, that it is from theſe *appendices* the blood flows into the cavity of the *uterus* in the time of menſtruation.

But what occaſion is there for conjectures, when poſitive proofs preſent themſelves. 1°. Highmore[1] aſſerts, "that having opened a woman, who died in the time "of her *menſes*, he found the internal ſurface of "the *uterus* was all frized with an infinite number of "mouths of veins which projected into it."

2°. Winſlow[2] affirms, *that the internal coat of the* uterus *is beſet with little hairs, extremely fine, and like the pile of velvet, in the women who die in the time of the* menſes; *and that theſe hairs are then red and tinged with blood.*

3°. According to Spigelius[3], "The internal coat "of the *uterus*, particularly towards the *fundus*, is "found in women, who have died in the time of "their *menſes*, pierced with a great number of holes, "very eaſily to be diſtinguiſhed in that ſtate; and "from whence it is believed the *menſes* flow."

[1] *Corporis humani Diſquiſition. Anatomic.* Lib. iii. part. iv. cap. 4.

[2] Expoſit. Anatom. du baſventre, p. 574. *Edit. in* 4°.

[3] *De humani corporis fabricâ.* Lib. viii. cap. 20.

4°. Mau-

4°. Mauriceau [1] declares, alſo, *that he has obſerved, very evidently, in the diſſection of women, who had been hanged as convicts . . . . . that the ſurface of the* uterus *was ſpread with little grumes of coagulated blood; and that its veſſels appeared much larger . . . . . and even all full of this coagulated blood towards the oriſices, which diſcharge themſelves into the* fundus *of the* uterus [2].

5°. Littre [3] has obſerved, in the ſame manner, on opening women dead in the time of their *menſes*, "That the internal ſurface of the *uterus* was all "ſprinkled with holes [3] very perceptible, and full of "blood; from whence, on preſſing the body of the "*uterus* from without inwards, the blood would "flow."

6°. Morgagni [4] moreover deſcribes "the internal "part of the *uterus* of women, who die in the time of "their *menſes*, as marked with many bloody ſpots, "from whence it is eaſy to preſs out drops of blood."

But it is very evident, that *theſe mouths of veins, which frize the interior part of the* uterus according to Highmore; *theſe hairs, red and tinged with blood,*

[1] *Maladies des femmes groſſes & accouchées.* Liv. i. cap. 10.

Obſervations ſur la groſſeſſe. Obſervat. 49.

[2] *Hiſtoire de l'Academie des Sciences.* Ann. 1720. p. 16.

[3] Littre adds, that he *has diſcovered the ſame kind of holes of the internal ſurface of the* uterus *in women, dead, during the time of pregnancy, but much leſs; and from whence, inſtead of blood, there only came out a whitiſh and milky fluid.* After which he endeavours to account for this ſuppoſed change in the magnitude of theſe holes, and in the nature of the fluid which flowed from them. But without ſucceeding in it. How could an anatomiſt, ſo intelligent, fail of comprehending, *that theſe holes full of blood, which he had ſeen in women, who died in the time of their* menſes, became, in the *uterus* of pregnant women, in conſequence of their being enlarged, *thoſe holes of a round or oval figure, of the bigneſs of from one line to two,* which he had obſerved, and deſcribed himſelf in 1701; *(Hiſtoire de l'Academie,* 1701. p. 293.) and that *theſe* other *holes,* from whence he ſaw drip the white and milky fluid in the *uterus* of pregnant women, were another kind of holes, which he could not diſtinguiſh in the *uterus* of women who died in the time of the *menſes,* becauſe they were then too little; but which became perceptible in pregnant women, by the increaſe of magnitude, that all the parts of the *uterus* ſuffer at that time?

[4] *Adverſaria Anatomica.* Adverſ. i. §. 33. & iv. §. 27.

which make the inside of the uterus *like velvet*, according to Winslow; *these holes, perceptible, and full of blood, with which the interior surface of the* uterus *is spread*, according to Spigelius and Littre; *these mouths, which discharge into the* fundus *of the* uterus, according to Mauriceau; and these *red spots, with which the interior coat of the* uterus *is marked, and from whence drops of blood may be squeezed out*, according to Morgagni; are no other than the veinous *appendices*, we have described; and which have appeared to these anatomists, more or less large, more or less long, more or less open, and more or less red, in the different subjects they have opened; and in the different states in which they have opened them.

These three questions being thus cleared up, the rest of the mechanism of menstruation displays itself spontaneously. The extremities of these *cæcal appendices* of the uterine veins, which are naturally gathered, and shut, cannot afford a passage to the blood of the *uterus*, in the time of the *menses*, if they be not inlarged, unfolded, and opened, by the effect of a *plethora*, or extraordinary fulness which distends them. But this *plethora* may be of two kinds; either common to all the vessels of the body; or peculiar to that of the *uterus*. It is therefore necessary, in order to account for the opening of the *appendices* in the time of the *menses*, to adopt, either an universal *plethora*, or fulness of the vessels; or a particular *plethora*, or fulness of the vessels of the *uterus*.

It is undoubtedly certain, that the universal *plethora*, or plenitude of the vessels, contributes to the copious quantity of the *menses*. Reason and experience concur to establish it; but that affords no authority for regarding this *plethora* as the cause of the *menses*, when it is considered, that they persevere often, and with constancy and regularity, in women extenuated by violent courses of physic; by watching, pain, or long sufferings; in whom there is scarcely, in all the veins, a fourth part of the blood, that ought to be there naturally; and in whom consequently there is

little

little room to suppose the *plethora* or plenitude necessary to produce the *menses*, if this opinion be allowed.

We are then reduced to the necessity of admitting only a local, or particular, *plethora* in the *uterus*, in the time of the *menses:* and with respect to that, every circumstance attendant on them appears strictly correspondent; and the most convincing proofs are found in the nature of the accidents, which precede, or accompany, the eruption of them. For, it is evident, that the swelling of the lips of the *vulva*; the tension and heat of the *vagina*; the pain in the *os pubis*, groins, and loins; the piles; the heat of urine, &c. which come at that time, are consequences of repletion, or *plethora*, which is then produced in the *uterus*; and communicated to the neighbouring parts.

According to some authors, this *plethora* of the *uterus*, in the time of the *menses*, must be a necessary consequence of the distribution alone of the blood-vessels in this part. They remark, that the blood, which is carried by the arteries from the heart to the *uterus*, descends in a right line; and that it must, therefore, pass more quickly, and more abundantly, than that which, in coming back by the veins, reascends perpendicularly, and consequently must rise more slowly, and in less quantity: as the cavity of the trunk of the *aorta descendens* is larger in women, than in men; and, of course, in women this trunk must convey more blood to the lower parts, than in men: that there is an almost infinite number of arteries and veins distributed in the *uterus:* that these vessels interweave, and wind about there in a thousand different manners; that they have communication with each other: that no valves are found in their cavities: that they are supported, in the internal surface of the *uterus*, only by a thin coat, free from fat; which renders it capable of yielding easily to their dilatation.

To follow their opinion, it would be inferred from thence, that the blood must pass copiously into the *uterus*; that it must come back with difficulty, and

in leſs quantity: that it muſt conſequently be obſtructed, and accumulated to the blood-veſſels, of which the windings, and the lateral communications, tend likewiſe to retard its courſe: that it muſt, by this means, dilate and diſtend theſe veſſels; diſtending them in a greater proportion, as they yield more eaſily to the dilatation, on account of their being ſupported on the outſide, by a conſiderably thick coat: and made narrower by valves within: and that it muſt finally, by theſe ſeveral means acting conjointly in this caſe, cauſe this local *plethora*, which produces the flowing of the *menſes*.

But much of the value of this opinion will be abated; if pains be taken to examine it with attention.

I. They, who maintain it, exaggerate too much the advantages they flatter themſelves may be drawn from the manner in which the blood-veſſels are diſtributed in the *uterus*. If the perpendicular direction of the artery, which carries the blood thither, and of the vein which conveys it back; or if the magnitude of the cavity of the trunk of the *aorta deſcendens* in women proportionably to men; muſt produce in women a *plethora* in the *uterus:* the like direction of the arteries, that go to the feet, and of the veins which come back from them; and the ſame magnitude of the cavity of the *aorta deſcendens*, in women; muſt cauſe in them alſo a plethoric ſtagnation in the feet; as much greater, as the velocity of blood towards the feet ought to be more rapid, on account of its being more in the direction of a right line; and the return of it ought to be more ſlow, on account of its being more long. Nevertheleſs experience evinces, that there does not happen any repletion from thence in the feet of women, nor ſhould there conſequently any happen from it in the *uterus*: theſe muſt however be admitted to be real cauſes of inequality in the manner, in which the blood goes to the parts and comes back from them: but theſe inequalities are wiſely balanced by means well underſtood; and by theſe means they are reduced to uniformity.

II. They

II. They lay too much ſtreſs, in the ſame manner, on the number of veſſels diſtributed in the *uterus:* the windings they make there; the *aneſtomaſes* which unite them; the defect of valves; the weakneſs of the coat that covers them, &c. Theſe remarks might, perhaps, hold good, as to the ſtate of the *uterus* in pregnant women: but they do not, as to the common ſtate of it, in young girls, from the age of puberty, to the time of their marriage: in which period, the *uterus* is much more denſe and compact than the brain, the lungs, and the greateſt part of the *viſcera* of the *abdomen*; and the veſſels, that ſupply them with blood, are then leſs, and more compact, than in theſe other parts.

III. But, even if the ſtructure and diſtribution of the veſſels of the *uterus* in young girls, and in pregnant women, be admitted to be ſuch as they ſuppoſe them, it could never produce any particular *plethora* there; unleſs it were cauſed by, and conſequential to, an univerſal *plethora*. It is a truth, too obvious to require demonſtration; and the more, as Dr. Friend the author, or at leaſt the principal patron of the opinion in queſtion, has been himſelf forced to grant it. On this ſcore, a particular *plethora* in women extenuated, in whom it would be abſurd to place an univerſal *plethora*, can not be admitted; and, conſequently, theſe women cannot have any *menſes*; which is contrary to experience; as has been obſerved before.

Let us, however, grant this ſuppoſition, falſe as it is: let us admit, ſince it is required, that an univerſal *plethora* is produced every month in women, who have the *menſes*. What can they infer from it? That a *plethora* muſt be produced every month in the *uterus*, proportionable to that which is produced in all the other parts. This may well be: but it will not be ſufficient to account for burſting the blood-veſſels in the *uterus*, ſooner than thoſe in the other parts: nor for the *uterus*'s being alone affected with the periodical evacuation of the *menſes*. It is neceſſary, in order to eſtabliſh ſuch a peculiarity of difference in this part, to

be able to prove, that there must be then produced in it a *plethora*, or dilatation of vessels, greater in proportion than in any other part of the body. But this is what they can never induce any body to believe. The brain, the lungs, the liver, the spleen, &c. are of a texture more lax, and more soft; have larger, and more vessels; receive more blood; and are more disposed to repletion, than the *uterus*, in girls of the age of puberty. Therefore, if an extraordinary *plethora* must be produced in some place, if this *plethora* must burst the vessels in some part, it is in these parts, rather than in the *uterus*; and it is in them, likewise, that the vessels would open, and the blood force a passage.

V. At least, it is very certain, that, on this supposition, the *plethora* must begin anew in the *uterus*, from the moment the *menses* have ceased: that it must augment there every day, by proportionable progressions: that it must distend the vessels half, or in a mean degree, by the fifteenth day; and two thirds, by the twentieth: and that it must, consequently, become sensible; and occasion, from that time, the same accidents, as some days later, near the eruption of the *menses*; less strong, indeed, because it is yet less great; but strong enough, notwithstanding, to be then perceptible. But this is repugnant to all experience. Women who are most subject to perceive heaviness, swelling, and heat in the *uterus*, and in the neighbouring parts, at the approach of the *menses*, never do perceive any at all, fifteen days before hand; nor even ten days. Which proves, that the *plethora* that happens in the *uterus*, in the time of the *menses*, does not begin so soon as they believe it: nor depends, consequently, on the cause which they imagine: that is to say, on the quantity of blood which is augmented in all the parts of the body, and produces an universal *plethora*.

VI. Moreover, in this *hypothesis*, there is no use made, for the explanation of the *menses*, of several parts which serve to compose the fabric of the *uterus*. I might even say further, that no application could be made of them in it: which is a very material defect.

For,

For, if it be not certain, at leaſt it is very probable, that all the different parts, which form the organs of the body, muſt, each of them, to conduce in ſomething to the mechaniſm of the functions which are proper to thoſe parts. I do not inſiſt upon the *cæcal appendices* of the uterine veins; becauſe, I confeſs, they might be applied with ſufficient effect, to account for the diſcharge of the blood, without ſuppoſing, as they do, lacerations to be made every month in the coats of the *uterus*, and of its veſſels. But I do not ſee, they can aſſign the leaſt employment, in this *hypotheſis*, to the vermicular veſſels of the *uterus*, which are found there, in ſo great number, under the internal coat; perforate this coat every where with ſo many holes; pour out through theſe orifices ſome particular humour into the *uterus*; and certainly muſt, for all theſe reaſons, have admiſſion, for ſome purpoſe, in the deſign of the author of nature, into every thing that regards the functions of theſe parts.

Theſe reflections lead naturally to three important concluſions.

The firſt, that the local *plethora*, which comes periodically in the *uterus*; and which is the cauſe of the flowing of the *menſes*; is made there independently of any univerſal *plethora*.

The ſecond, that it can be cauſed there in this manner, only by a particular compreſſion, to which the blood-veſſels are ſubjected every month; and which interrupts the free courſe of the blood.

The third, that it is only the vermicular veſſels of the *uterus* which can, by tumifying every month, compreſs periodically, in this manner, the veins of the *uterus*; ſince there is nothing but theſe veſſels, which is near to, or, to ſpeak more properly, ſurrounds theſe veins.

There only remains then to account for what may periodically inlarge theſe vermicular veſſels every month. But that comes out naturally from the uſe of theſe veſſels, according to the explanation given of it in the preceding chapter.

There

There is separated in these vessels, from the age of puberty, a lymph that is milky, and consequently thicker than common lymph. The thinnest part of this may be easily absorbed by the lymphatic veins, which take their rise from these vessels: but the thickest, and most viscid, will remain in their cavities. It is indeed, at first, only a small proportion: but, after a certain space of time, which experience shews us to be commonly one month, the quantity of it accumulated, becomes sufficient to swell the vermicular vessels, even so as to render them capable of compressing the capillary ramifications of the veins, near or around which they are placed. From hence the blood, checked in its direct course, regurgitates on the lateral *appendices*; distends; elongates; dilates; and, at last, forces them to unfold, open, and discharge the blood into the cavity of the *uterus*, into which they project.

At the same time, as reaction is always equal to action, the capillary veins, compressed by the vermicular vessels, compress them again with the same force, as they are compressed by them. The humour, therefore, contained in them being strongly pressed on the one hand; and being incapable, on the other hand, through its viscidity, of penetrating into the lymphatic veins; is forced to push forward on the excretory orifices of these vessels; to dilate them; and to open, by that means, a passage into the cavity of the *uterus*; at the same time that the blood flows into it from the veinous *appendices:* which constitutes the menstrual flux, or the *menses* of women.

This discharge must last till the quantity of milky lymph, which fills the vermicular vessels, and that of blood, which fills the *cæcal appendices*, are evacuated: but as soon as these vessels are emptied, they close themselves, have their orifices gathered up, and become impervious. By this means, the vermicular vessels are rendered capable of again retaining the most thick part of the milky lymph, which they separate; of filling themselves with it anew to the same degree, and nearly in the same space of time; and of reproducing

producing thus every month, by the ſame mechaniſm, a ſimilar diſcharge.

It appears from hence, that this explanation is ſimple, agreeable to the known ſtructure of the *uterus*, and founded on obſervations on the ſtate in which the *fundus* of the *uteras* is diſcovered to be at the time of the *menſes:* and that it does not leave any parts of the *uterus* without their proper employment in that function, in which it is fit they ſhould all have ſome ſhare. We ſhall find in the ſequel, that it is ſuited to the accounting for all the facts that regard the menſtrual flux in the ſtate of health; and for all the diſorders, which may ſupervene in the ſtate of diſeaſe. Theſe conſiderations, duly weighed, are certainly cogent reaſons for determining to embrace it.

§. III. CONSEQUENCES.

From what has been already ſaid, it may be concluded, 1°. That the menſtrual blood does not flow from the *uterus*, through the pores of their coats, by a kind of tranſudation, or *diapedeſis*. It is not quite clear, that the blood may never eſcape thus out of its veſſels: but it is evident, that the menſtrual blood, thick as it is, and flowing copiouſly, does not find a paſſage out by that way.

2°. That the menſtrual blood does not paſs by way of irruption from the blood-veſſels into the glands, or vermicular veſſels of the *uterus*, to be diſcharged into its cavity through their orifices. This opinion is nothing more than an *hypotheſis*, arbitrarily formed, and void of the leaſt proof; in which, moreover, there cannot be aſſigned any cauſe for the blood's being periodically, every month, compelled to take theſe new courſes in the glands. In ſhort, it muſt be admitted, according to it, that a real inflammation is made every month, during the *menſes*, on the whole interior ſurface of the *uterus:* for ſuch a ſuppoſed irruption of blood into the lymphatic glands would be actually ſo. But this ſuppoſition not only offends againſt probability, but is abſolutely falſified by experience.

3°. That

3°. That the menſtrual blood does not flow from the arteries, but from the veins. If even the ſtructure of the veſſels of the *uterus*, and the conſequences that may be inferred from it, were ſtill unknown, at leaſt it would, in all caſes, be certain, that the coats of the arteries are ſtronger, thicker, and more compact, than thoſe of the veins; and that would be ſufficient to ſhew, that they are capable of reſiſting cauſes of dilaceration, to which thoſe of the veins muſt yield; and therefore, *cæteris paribus*, it is from the veins that the diſcharge of blood muſt be made in the *menſes*.

4°. That the menſtrual blood does not flow from the extremities of the veins, through places torn or divided by violence, but from their *appendices* opened without dilaceration. As the menſtrual flux is a proper part of the plan of nature, it muſt be made by veſſels capable of opening of themſelves without dilaceration. What ground of apprehenſion for the *uterus* would there not be given from ſuch an infinite number of lacerations, that would be renewed every month during near forty years: ſince we ſee, that the ſpittings of blood from the *thorax*, leſs great, and leſs often repeated, are in the ſequel almoſt always followed by ulcerations of the lungs?

5°. That the periodical flowing of the *menſes* is not the effect of any latent ferment in the *uterus*; nor of any fermentation which is produced in its veſſels. The opinion, or rather the *hypotheſis*, refuted here, was commonly received, and with applauſe, in the laſt age. It was indeed a time when *hypotheſes* were in requeſt; and when an opinion, like this, was very well ſuited to gain a favourable reception. But at this time a greater nicety in theſe matters prevails; and there ceaſes to be any diſpoſition for admitting, without proof, a ſuppoſed ferment in the *uterus*, to account for the periodical returns of the *menſes*; which may be explained in a manner more ſimple and more conformable to the real ſtate of the *uterus*.

6°. Finally,

6°. Finally, that the return of the *menſes* does not at all depend, either on the *phaſes*, or influence of the moon. This opinion is ſtill more abſurd than the former. It has, however, been in vogue in its time: but it is certain, that was a time of ignorance, and credulity; whereas the precedent opinion has only prevailed ſince the beginning to adopt the principles of natural philoſophy of Deſcartes; that is to ſay, in a time which boaſts of being inlightened, with relation to that branch of ſcience.

§. IV. *Explanation of the facts which reſpect the* menſes.

The ſame order will be obſerved in the explanation of theſe facts, that has before been obſerved with relation to the preceding: ſo that the numerical diviſions of this article will correſpond with thoſe of Article I.

I. The humour, which is ſeparated in the vermicular veſſels of the *uterus*, is in ſmall quantity, and ſcarcely any thing but lymph, till the age of fourteen; for the reaſons, which are aſſigned in the foregoing chapter. So that, till ſuch age, this humour is intirely taken up again by the lymphatic veins, which riſe from theſe veſſels, without any thing remaining that, by the tumefaction of them, can occaſion a compreſſure of the uterine veins; or cauſe thence the leaſt diſcharge of the *menſes*. But towards the fourteenth year a change of theſe matters happens. On the one hand, it is then ſeparated in greater abundance: and, on the other, it becomes more thick; as has been ſhewn above in the ſame chapter. So that the lymphatic veins are not then ſufficiently numerous to abſorb the whole: while, moreover, their ſmallneſs allows them only to abſord the moſt liquid part. The reſt, that will be always the moſt thick part, ſtagnates in the vermicular veſſels; which, in conſequence of being then dilated by it, compreſs at laſt the neighbouring veins; and produce thus the firſt eruption

of

of the *menſes*, by the mechanical effect we have above diſplayed.

The time of this eruption muſt of courſe be various: and it does vary accordingly in different ſubjects. It happens before the fourteenth year in girls, who begin to leave off growing ſooner; are very ſanguine, and plethoric; lead a ſedentary and inactive life; have the texture of the fibres, and eſpecially that of thoſe of the *uterus*, lax; and in whom their imagination is early heated with amorous deſires by the effect of conſtitution, reading, converſation, example, &c. It does not happen, on the contrary, till after fourteen in girls, of whom the growth is more ſlow; who are inured to hard labour; or to a ſlender diet; in whom the texture of the fibres of the *uterus* is more cloſe and more denſe; who are modeſt by conſtitution, education, &c.

II and III. The return of the *menſes* can be expected, only when the vermicular veſſels find themſelves again full of the milky lymph, to compreſs the neighbouring veins with ſuch a degree of force, as is neceſſary to cauſe the lateral *appendices* to open. Becauſe it is evident, that there muſt be a certain time allowed to give to theſe veſſels this degree of plenitude: and experience has ſhewn, that this time muſt be one month. The evacuation of the *menſes* can, therefore, return only once in a month: but it muſt return once every month, in a regular periodical order.

This does not, however, hinder, but that the *menſes* may return ſooner, and more often in women who eat much, uſe little exerciſe, have the texture of the *uterus* lax, and the reſiſtance of the veſſels ſlender; and in whom the *uterus* is often heated, and above all excited to lively contractions, &c: and that, on the contrary, they may not return ſo ſoon, and leſs often, in hard working women, who are more temperate in their living, have the *uterus* more contracted, and ſupplied with veſſels that are leſs and more compact; and are, moreover, expoſed more rarely to contractions, and to ſuch motions only as are gentler.

IV. The flowing of the *menſes* can only continue at each return, till ſuch time as the milky lymph, which fills the vermicular veſſels, and the blood that is accumulated in the *cæcal appendices*, and in the veins from whence theſe *appendices* ſpring, are exhauſted; and from hence ariſes the reaſon, why the continuance of the *menſes* is ſo variable. If the quantity of theſe humours accumulated be ſmall; the diſcharge made by orifices much dilated, and happening at the ſame time through the whole extent of the *uterus*; the *menſes* muſt in ſuch caſes be of ſhort duration. They muſt, on the contrary, laſt a long time, when theſe humours are accumulated in great quantity; and eſcape only through little apertures; and when the diſcharge is made ſucceſſively in different parts of the *uterus*. It is, nevertheleſs, true, that experience has fixt the ordinary duration of the *menſes* to be from three days to ſix: and this calculation ſuffers few exceptions, at leaſt in a healthful ſtate of the ſubject.

V. To judge of the manner in which the *menſes* are diſcharged, attention muſt be given both to each of the veſſels of the *uterus* in particular; and to the whole of them taken together. If the particular veſſels be conſidered, each begins to open, and its opening inlarges by degrees; becomes as great as it can be, and diminiſhes afterwards, till the veſſel be again cloſed. If the ſame veſſels be conſidered in a collective view, ſome of them open firſt; the number of thoſe which are opened increaſe little by little, become as great as is poſſible, and diminiſh afterwards in the ſame order. Thus, in whatever manner the veſſels, through which the diſcharge of the *menſes* is made, be conſidered, it is evident, 1°. This diſcharge muſt have three regulated diviſions of time; that of *augmentation*, commencing from the moment it begins; that of the *ſtate* where it is in the *greateſt degree*; and that of *diminution*, which leads at length to *ceſſation*. 2°. The duration of each of theſe diviſions muſt generally correſpond, with ſome degree of exactneſs, to the total duration of the diſcharge.

VI. No-

VI. Nothing is more uncertain, than the quantity of blood which is discharged by the *menses* at each return: because this quantity is liable to vary, according to the greater or less abundance of the blood in the body; according to the state of the veins of the *uterus*, with relation to their being more or less large, more or less distended, and more or less full: according to the state of the orifices of the *cæcal appendices*, with respect to their being larger or smaller, and more or less open, or shut; according to the proportion of number in which these *appendices* open themselves at the same time; according to their being open a longer or shorter time; or according to the celerity with which the blood, that finds a passage through them, flows, &c. Nevertheless, experience seems to determine, that the quantity of the *menses* is seldom under six ounces, nor above eight; at least in a well established state of health: and it may be safely confined within these bounds, without danger of any considerable error.

I am not, however, ignorant, that Hippocrates [r] has fixed this quantity to two κότυλαι, or *heminæ Atticæ*; and that these two *heminæ* are usually estimated, as equal to twenty of our ounces. But we may justly conclude, either that this valuation of the *heminæ Atticæ* is not just; that the observation of Hippocrates is not very accurate; or that the women, who were the subject of this observation, had the *menses* in greater abundance than those known to us.

VII. In the women, with whom the resistance of the vessels of the *uterus* have a certain degree of mediocrity; that is to say, in women who are healthful, and of a good constitution; the *cæcal appendices* must resist with a certain degree of force to their dilatation and opening; and this resistance must, also, in propor-

[r] Μέτρια δ' ἐστι πάσῃ γυναικὶ χωρέειν, ἢν ὑγιαίνῃ, τὰ ἐπιμηνία ἐλθόντα ὅσον κοτύλαι δύο Ἀττικαὶ, ἢ ὀλίγῳ πλέονα, ἢ ἐλάσσονα.

Omni mulieri, si sana sit, proportion, deuntes menses moderati sunt, qui ad duarum Atticarum heminarum mensuram, aut paulò plures, aut pauciores. *Hippocr.* Lib. i. *De morb. mulier.* cap. 15.

tion, produce, and accelerate their contraction, and closing. There ought, consequently, to be in such women, a pretty regular proportion, but in a reversed order, betwixt the progress of the augmentation of the *menses*, and the progress of their diminution: which is, indeed, most commonly found.

This rule suffers, nevertheless, two opposite exceptions in the two cases of the extreme: the one, when the resistance of the *appendices* is too weak; for then the *menses* augment quickly, but diminish slowly, and with difficulty: the other, when the resistance is too strong; for then they augment with difficulty, and slowly, though they diminish very fast.

VIII. The duration, and the quantity of the *menses*, are generally nearly equal at each return; because, generally the compactness, and resistance, of the *cæcal appendices*, are nearly the same, in the whole extent of the *uterus*, in the same subjects; and, therefore, every thing else remaining equal, the same number of *cæcal appendices* must open at each return, and in the same degree; which must furnish the same quantity of blood; and that nearly in the same time. But this uniformity cannot subsist, if there happen to be any difference in the compactness, and the resistance of the different *appendices* of the *uterus*: for, in order to force those which may be more lax, it suffices, that the vermicular vessels, which surround them, should be full of the milky lymph accumulated for a month; instead, that it is requisite, the vermicular vessels, placed near *appendices* of a more tense texture, should be doubly filled; and, consequently, by a lymph accumulated for two whole months, in order to force them. In these women, therefore, there will be alternately, sometimes *menses*, that are short in duration, and small in quantity; because they are furnished by those *appendices* solely, that are most easy to be opened; and sometimes *menses*, which are more long and more abundant; because they are furnished, both by these *appendices*;

dices; and by thoſe others, which were not opened the preceding month.

There are even women, in whom certain of the *appendices* are ſo tenſe, and ſo contracted, that the milky lymph has occaſion to accumulate itſelf during three months in the neighbouring vermicular veſſels, to force them to extend and open; and from thence it happens in ſome women, that after two returns of the *menſes*, moderately uniform, there comes periodically a third [1], which is more abundant, and more long: becauſe that they flow from a greater number of *appendices*. The truth of the explanation, we have been giving, is proved from that the women who have the *menſes* moſt in quantity, or at a longer diſtance than two or three months, are never in perfect health, except after the moſt copious return of them; becauſe, it is only then, that all the veſſels of the *uterus* are intirely diſgorged: whereas, after the moderate returns, they continue to feel themſelves heavy, and to be ſubject to habitual pains of the reins: which ſufficiently evinces, that there remains in the *uterus* a fund of *plethora*, which overloads it.

IX. As the compactneſs, and the reſiſtance of the *cæcal appendices*, are nearly uniform through the whole extent of the *uterus*, in women who are healthful, and of a good conſtitution, they muſt generally all open at the ſame time; or at leaſt nearly one to the other; and in a ſucceſſion ſufficiently equal to ſupport an uniform diſcharge, or ſuch, however, as is continual from the beginning to the end. It may happen, nevertheleſs, and it ſometimes does ſo, that the compactneſs and the reſiſtance of the *appendices* vary enough, in the different places of the *uterus*, to occaſion, that

[1] Καὶ ταῖς μὲν συνεχῶς καθ' ἕκαστον ὀλιγάκις τὰ κάλαμηνια φοιτᾷ: παχὰ μῆνα δὲ τρίτον ταῖς πλείσταις.

Rarò ſingulis menſibus menſtrua confertim fluunt: menſe verò tertio pluribus. *Ariſtoteles.* Lib. vii. *De Hiſtor. Animal.* cap. 2.

Hoc malum (menſtruatio) tricenis diebus in mulieribus exiſtit, & trimeſtri ſpatio largiùs. *Plinius, Hiſtor. natural.* Lib. vii. cap. 15.

ſome

ſome will only open, when the others are already cloſed: becauſe, in order to make them open, there muſt be a greater degree of fullneſs in the vermicular veſſels; and then the *menſes* will flow at two different times; and the intervals be longer or ſhorter, according as the difference betwixt the compactneſs, and the reſiſtance, of the *appendices*, is greater or leſs. If the number of *appendices* leaſt cloſed, and which open the firſt, is greater than that of the others, the firſt diſcharge will be the moſt conſiderable: but it will be the contrary, if the number of *appendices* moſt cloſed, exceed that of the others.

X. The blood of the *menſes* is veinous; and does not at all differ from the reſt contained in the veins; or differs, at moſt, only in the admixture of a very little quantity of the milky lymph, which is diſcharged from the vermicular veſſels, that is of itſelf pure and laudable in a ſtate of health, and conſequently cannot alter the purity of blood with which it is mixt. It is, therefore, with great reaſon, that Hippocrates [1] aſſures us, the blood of the *menſes* is intirely like that which flows from a victim that has its throat cut. The only matter of wonder is, ſuch a number of phyſicians [2], and natural philoſophers, have attributed ſo many bad qualities to it, for want of having diſtinguiſhed what relates to this blood, in certain circumſtances, where it is corrupted, from what relates to it while it continues in its natural ſtate.

XI. It has been already remarked more than once, that in the flowing of the *menſes*, there is diſcharged both the blood of the *cæcal appendices*, and the milky lymph of the vermicular veſſels; that theſe two hu-

[1] Χωρέει δὲ αἷμα, οἷον ἀπὸ ἱερείε, καὶ ταχὺ πήγνυται, ἢν ὑγιαίνῃ ἡ γυνή.

Prodit autem ſanguis qualis è victimâ, & citò concreſcit, ſi mulier ſana ſit. *Hipp.* Lib. i. *De morb. Mulier.* cap. 15.

[2] Columella, *De ruſticâ.* Lib. xi. cap. 3.

Palladius, *De re ruſticâ.* Lib. i. titul. 35.

Plinius, *Hiſtor. Naturalis.* Lib. vii. cap. 15.

Ælianus, *de Animalibus.* Lib. xi. cap. 3.

Solinus, *in Polyhiſtore*, cap. 4.

Fernilius, *Phyſiologiæ.* Lib. vii. cap. 7.

mours commix with each other; and that, together, they conſtitute the diſcharge of the *menſes*. When the *cæcal appendices*, and the vermicular veſſels, open, and cloſe themſelves at the ſame time, the lymph, and blood, begin, and ceaſe, to be diſcharged together; which occaſions, that the lymph, being tinged by the blood, cannot be diſtinguiſhed: as is really the caſe in healthful women. But if, by chance, any vermicular veſſels open in ſome women ſooner than the *appendices*; if, on the contrary, in others, part of the vermicular veſſels cloſe themſelves later; or if, moreover, in ſome, a portion of the vermicular veſſels open ſooner, and cloſe later; it will happen, in the firſt caſe, that the diſcharge of the *menſes* will be preceded for ſome hours by a lymphatic diſcharge; that it will be, on the contrary, ſucceeded by ſuch in the ſecond; and that in the third, it will be both preceded, and ſucceeded, by it. Inſtances of each of which three caſes are not rarely found.

XII. In women with child, particularly in the laſt months of their pregnancy, the milky lymph of the vermicular veſſels, and the blood of the *appendices*, are employed to nouriſh the *fœtus*. There cannot, conſequently, be any menſtrual diſcharge in pregnant women; eſpecially in the laſt ſix months.

XIII. In women who give ſuck, particularly in thoſe who abound with milk, all the milky lymph is carried to the breaſts: which occaſions, that there is not any ſeparated in the *uterus*; or, at moſt, not enough to produce the *menſes*.

In peaſants, and hard working women, there is little chyle made; becauſe they are ill fed; and that, which is made, is conſumed by labour. The lymph of the *uterus* muſt, therefore, in ſuch women, be ſmall in quantity; not very milky; and, conſequently, not well ſuited to procure the *menſes*. I queſtion, nevertheleſs, whether this be a ſufficient cauſe for an abſolute and conſtant ſuppreſſion of the *menſes*, ſuch as may be ſometimes obſerved in ſome of theſe women, at leaſt where there is not joined to it a natural

ral compactneſs of the *uterus*, that puts it in a condition to reſiſt the dilatation of the veſſels: which, although it is periodically made in theſe women, can only be made weakly.

XIV. Finally, the evacuation of the *menſes*, after having prevailed during thirty, or thirty-five years, ceaſes of itſelf towards the forty-fifth, or fiftieth year; which ariſes from two cauſes that jointly concur; and that are the neceſſary conſequence of age. The one, that the lymphatic humour of the *uterus* is then leſs abundant, and leſs milky; becauſe the action of the ſtomach is weakned, and does not make ſo much chyle: from whence it reſults, that the vermicular veſſels are not enough dilated, to ſtop the courſe of the blood in the veins. The other, that the fibres of the veins of the *uterus*, and particularly thoſe of the *cæcal appendices*, have acquired, towards this time, too much rigidity, and inflexibility, according to the nature of tendinous fibres; of which it is a property to grow hard by age: which occaſions, that theſe *appendices* are no longer in a condition to be extended, unfolded, or opened, as in their common ſtate. Thus, the force, which produces menſtruation, leſſening, daily, on one ſide, and the reſiſtance, which oppoſes menſtruation, increaſing in proportion on the other, it muſt reſult, that the *menſes*, after having diminiſhed little by little; after having been often retarded; and after having ſometimes failed, at laſt intirely ceaſe.

As the time, when the *menſes* begin, varies in different ſubjects; that, when it ceaſes, varies not leſs. In general, theſe variations depend on that condition of the fibres, and the veſſels of the *uterus*, with reſpect to their being more or leſs cloſed, with which the perſon is born; on the quality and abundance of the food with which they are nouriſhed; on the more or leſs laborious life which they lead; on the health they have enjoyed, or the diſeaſes to which they have been ſubject; on the more or leſs frequent child-bearing they have undergone; on the hotter or colder temperature of the climate where they have lived,

&c. For it is evident, that the degree, or application, of these different causes, and of their combinations, may contribute to retard, or to accelerate the inevitable effects of old age.

§. V. *Explanation of the symptoms of menstruation.*

These different symptoms, of which we have enumerated the principal in the XIIIth article, are so naturally deducible from the theory, we have above established, that they seem to afford a new proof of the truth of it.

1°. As the vessels of the *uterus* are replete with blood, at the approach of the *menses*, it is a necessary consequence, that such as is brought there anew by the spermatic, hypogastric, and internal hæmorrhoidal arteries, cannot be easily received by them; and that it will be compelled to turn off, as to the greatest part, by the collateral branches of these arteries, which go to be distributed in the ovaries, broad ligaments, round ligaments, tendinous and muscular parts of the *hypogastria*, *vagina*, lips of the *vulva*, and *anus*. Thus the surcharge of blood, which happens from thence in these different parts, must produce there a painful tension, more lively, or more dull, according to the repletion of the *uterus*: and it is from thence that arises the pain of the *pubis*, and the groins, and kidneys, or rather loins: the numbness of the breech; the swelling of the lips of the *vulva*, or the pimples which rise on these lips; the tension, heat, and sensibility of the *vagina*; the internal, or external piles, &c.

2°. The more the *uterus* is swelled, and heated, at the approach of the *menses*, by the blood which is accumulated in its vessels, the more it must compress and heat the bladder with which it is closely connected; and also, at the same time, the urine that is contained in it. From thence results the heat of urine that happens at the approach of the *menses*, what-

whatever cauſe it may be attributed to by ſome: whether only to the heat communicated to the urine; whether only to the increaſe of ſenſibility, that the heat of the *uterus* cauſes in the neck of the bladder; or whether, as is moſt evident, to the concurrence of theſe two cauſes, which are both really exiſting. From thence comes, alſo, the frequent need of making water, to void only a ſmall quantity at each time: whether this need be attributed to the leſſening the bladder; which cannot, under theſe circumſtances, extend itſelf ſufficiently, becauſe it is compreſſed by the *uterus*; to the heat of the urine, which occaſions, that it irritates the neck of the bladder in a more lively manner; to the ſenſibility of this neck, which the heat of the *uterus* augments, and which makes it feel, more vividly, the action of the urine; or to theſe three different cauſes, which, being then conjoined, act all together.

3°. Sometimes, at the approach of the *menſes*, the urine will be opake and thick, which happens in women, with whom the eruption of the *menſes* is preceded by a lymphatic diſcharge, that renders the urine turbid, by mixing with it, as it flows out. At other times, it is voided clear; but becomes turbid, and thick, ſometime after, on growing cold. This happens, becauſe ſome ſmall quantity of the milky lymph, which cannot be ſeparated ſo eaſily in the veſſels of the *uterus*, on account of their too great fulneſs; and is compelled, for that reaſon, to remain in the blood; is filtred, promiſcuouſly, with the urine in the kidneys; which does not alter the tranſparency, ſo long as the heat keeps the parts ſufficiently attenuated; but renders the urine thick and opake, as ſoon as theſe parts begin to approach each other, to unite, and to precipitate in the urine as it grows cold. For this reaſon it often happens, in the caſe of perſons who eat much, that the urine, which they make, in the time of digeſtion, is charged with ſome chylous parts, that cauſe it to become milky on cooling.

4°. If it be granted, that the vermicular veſſels of the *uterus* are full of milky lymph at the eve of the *menſes*, it muſt be admitted, alſo, that they are not then in a condition to receive a freſh quantity. It follows, therefore, that ſuch as is continued to be formed, muſt remain in the blood. But, in conſequence of being accumulated there, it muſt, at length, mix with the greateſt part of the lymphous, or ſerous humours. This is what we have already remarked, with relation to the urine; and what we ſhall remark, hereafter, with reſpect to ſeveral other humours. But it muſt, above all, be mixed, and that very abundantly, with the milky lymph of the breaſts, with which it has a perfect analogy. It is from hence, that the *veſiculæ* of the breaſts, where this lymph is ſeparated, are then ſo full; and it is this which cauſes the tenſion and ſwelling of the breaſts, that always precede the *menſes* in all women while they are young.

5°. In women who are plethoric, the blood muſt regurgitate into all the parts at the approach of the *menſes*; and this muſt particularly happen in the ſoft parts; as the lungs, the brain, &c; either becauſe the blood-veſſels are more diſpoſed to dilate in theſe parts; or, becauſe the repletion of the *uterus*, which ſhortens the courſe of the blood towards the inferior parts, muſt augment it as much in proportion towards the ſuperior. Thus it is from this particular compreſſion, that the lungs ſuffer at ſuch time; and that thoſe oppreſſions and choakings ariſe, which happen twenty times, in as many hours, in ſome women, for a day, or ſometimes two, preceding the *menſes*.

6°. The blood, which overloads the ſubſtance of the brain, at the ſame time, and from the ſame cauſe, produces there, in different ſubjects, two very different effects. When it is thick or ſerous; and the beating of the arteries is ſlow, rare, and weak; it does nothing more than load, or relax, the fibres of the brain, which cauſes a drowſineſs. On the contrary, when it is thin, hot, dry; and the pulſations of the heart, and the arteries, are briſk, frequent, and

ſtrong; it agitates and parches theſe fibres; and produces then an *inſomnia.*

7°. In either of theſe caſes, the blood which ſurcharges the brain, ought equally to cauſe the headach, but an headach of different kinds: of which the pain is gravid in the firſt caſe; and diſtenſive, or divulſive, in the ſecond. Thus we find, that there are women who complain, at ſuch times, of having the head dull, and heavy; while there are others, who talk of nothing but tearings and ſhootings in the brain.

8°. As in all women, the *uterus* is diſtended, and ſwelled in the time of the *menſes*; and as there are ſome in whom it is ſo, to ſuch a degree, as to render it painful; the ſenſations which are perceived there, from time to time, muſt make the ſpirits flow back, towards the brain, with force, even during ſleep; and muſt, from thence, give riſe to thoſe unquiet and frightful dreams; and wakings in ſtarts; eſpecially in women, who do not ſleep ſoundly; who have a very lively imagination; and in whom the *uterus* is expoſed to attacks of the cholic in the time of the *menſes.*

9°. The different accidents, which precede the *menſes*, depend all on the repletion of the blood-veſſels of the *uterus.* For, as to that which is made inſenſibly, and by ſlow degrees, in the vermicular veſſels, the ſmallneſs of thoſe veſſels prevents it from being ever conſiderable enough, to be able to produce any very perceptible effect. But the blood-veſſels of the *uterus* are replete only in the laſt days, when the vermicular veſſels have attained their greateſt degree of plenitude. It is, therefore, evident, that theſe accidents can only appear a few days before the eruption of the *menſes*; which experience confirms; ſince they never happen, except a day or two before the *menſes*, in women with whom the veinous *appendices* are eaſily opened, and yield, without difficulty, to the compreſſion of the vermicular veſſels; and ſcarcely ever ſooner than three or four days, at moſt, in thoſe, with whom

whom theſe *appendices* have greater reſiſtance; and are more difficult to be opened.

§. VI. *Uſes of menſtruation.*

It reſults from what has been ſaid,

I. That the menſtrual flux muſt, every month, dilate, ſwell, and inlarge the *uterus:* from whence may be inferred, that it facilitates conception. For we ſhall ſee below, that it is neceſſary for conception, the *uterus* ſhould be rare, porous, and diſpoſed to ſuffer itſelf to be penetrated by the ſeminal parts.

II. That the menſtrual flux muſt, every month, extend, elongate, and ſupple the *lateral appendices* of the veins of the *uterus*; from whence may be deduced, that it ſerves to facilitate the union of the *placenta*; and, conſequently, of the *fœtus* with the *uterus*. For we ſhall ſee below, that theſe *lateral appendices*, which lengthen in *utero*-geſtation; and inſinuate themſelves into the *placenta*, form the principal connections that unite the *fœtus* with the *uterus*.

III. That the menſtrual flux ought every month to unfold and open the orifices of the vermicular veſſels; and the veinous *appendices* of the *uterus:* from whence it follows, that it ſerves to facilitate the paſſage of the *fœtus*. For we ſhall ſee below, that it is, by theſe orifices of the vermicular veſſels, and extremities of the veinous *appendices*, the *fœtus* receives the milk, and blood, by which it is nouriſhed.

IV. That the menſtrual flux muſt, every month, ſupport, and augment, the ſuppleneſs and reſiſtance of the fibres of the *uterus:* whence it follows, that it ſerves to facilitate delivery. For, we ſhall ſee below, it is neceſſary for delivery, that the fibres of the neck of the *uterus* yield, and be elongated; and that thoſe of the *fundus* cloſe, and contract themſelves.

It is evident, therefore, that the menſtrual flux is very uſeful; let us even ſay neceſſary, for generation: and that it is not, without reaſon, the author of nature has ſubjected all women to this inconvenience: ſince it is only, by the advantages it procures, that

women

women can hope to conceive; nouriſh the infant they have conceived; and be happily delivered of it.

In this, experience is found perfectly conformable to reaſon. It is rare, not to ſay impoſſible, that women who have never had the *menſes*; or who no longer have them; become pregnant, or at leaſt conſerve their fruit, and are happily delivered of it. One may quote, on this head, a common proverb, which ſays, that *qui ne fleurie pas, ne graine pas*; which is, "that "women, who have no *flowers*, or *menſes*, can have "no fruit or children."

The example of the females of other animals, which they oppoſe commonly to this reaſoning, far from proving, that menſtruation is not neceſſary, ſerves, on the contrary, to ſhew the abſolute neceſſity of it. I ſhall wave alledging, as an anſwer to it, the particular inſtances of the females of monkies, and of ſome other animals, in whom a menſtrual flux is obſerved, like to that of women. I believe myſelf to be maſter of a reaſon, infinitely more concluſive, in maintaining, that, ſince the females of all animals have a lymphatic and bloody diſcharge during the time they are *venereally* hot, they have all the true periodical *menſes*. It muſt be confeſſed, that theſe *menſes* do not return oftner than once or twice in a year: and alſo, that they are only in a ſmall degree bloody: but ſuch as they are, they are yet *menſes*; and *menſes* proportioned to the particular needs of each of theſe animals; and which produce in them the ſame advantages, as the more abundant *menſes* produce in women.

It is from hence, one may account for ſome women who have conceived, and become mothers, even of ſeveral children, without having ever had the *menſes*. There is great room to believe, thoſe who relate theſe accounts, had not the attention to examine, with care, the condition of the women of whom they pretend to have given them. They perceived, that theſe women had not a copious diſcharge of blood, ſuch as other women generally have: and this induced them to ſay, they never had any *menſes*

ſes at all. It is ſcarcely a doubt, nevertheleſs, but that they had periodically a diſcharge of milky lymph, tinged with blood; and this was *menſes* ſufficient enough to render them fecond, allowing for their natural conſtitution, their way of living, the conformation of their *uterus*, &c: as ſimilar *menſes* ſuffice in the females of other animals.

We may go yet further, and ſuſpect, that it is in this manner the *menſes* are had in all thoſe peaſant girls, hard working women; and, moreover, thoſe others whom they pretend have never had any without being affected in their health, and whom they ſignify commonly by the Latin word *viragines*; as meaning that they partake, in ſome manner, of the nature of men. It is thus, in matters of natural philoſophy and medicine, the more we examine and find, we muſt diminiſh the number of prodigies; the more reaſon we have to be convinced, the rules eſtabliſhed by nature are always very general, and very invariable.

There is little wanting, even that, in order to eſtabliſh a more general uniformity in this point, I ſhould be tempted to believe, that the abundance of the *menſes*, ſuch as is obſerved, for the moſt part, in women, is not the primitive inſtitution of nature. We know, that, moſt commonly, women in the country, who eat ſparingly, have leſs *menſes* than thoſe, who, living in towns, feed more plentifully. The greateſt part of travellers relate, that, among wild nations, the women have no *menſes*, or only very little of them. Lery [1] ſays it of the women of Topinambos: Charleton [2], of the women of Tapnias, in the Brazils: Pechlin [3], of the women of Greenland. This ſeems to give room to think, that the ſame ought to be general in all women; that thoſe, who have continued to live in the firſt ſimplicity of nature, continue alſo to enjoy thoſe advantages which nature had granted them; and

[1] Johannes Lery, *Navigationis in Braſiliam*, cap. 16.

[2] *De cauſis Catameniorum*, cap. 4. Ubi laudat Johannum Stadium.

[3] *Obſervat. Phyſico-Medicar.* Lib. i. Obſerv. 34.

that

that if the women of nations, which are called *civilized*, are, on the contrary, subject to the *menses* more abundantly, and with greater trouble; it is only because luxury, and the excesses of the life they lead, pervert their natural constitution; and multiply, or augment, their infirmities.

CHAP. III.

Of the first eruption of the menses; *and of the accidents which precede, or accompany, it.*

§. I. Description.

IN the girls, who have attained the age of puberty; and in whom the first steps of nature, to procure the eruption of the *menses*, already take place; the *uterus*, and the different vessels by which it is supplied, and this eruption must be made, may be in five various states: each of which may be regarded as a simple state; supposing that it is found alone in the whole extent of the *uterus*. But, as several of these various states may concur together in the *uterus*, although in different places; as they may then severally be in unequal degrees; and as each may occupy spaces, more or less extended; there must result from these different combinations, several new states of the *uterus:* which must constitute as many new kinds of inconveniencies; or, at least, as many particular symptoms.

We propose to explain particularly here only the five first states; which we shall consider as simple. For, as to the other more compound states, which are in a considerable great number, it will suffice to have pointed them out; because their theory, and their manner

manner of cure, may eaſily be deduced from thoſe of the ſimple ſtates: and nothing more is wanting, than to apply to them the explanations, and the intentions, that will be propoſed for each of the ſimple ſtates, which form them by their concurrence.

FIRST STATE.

In this ſtate, every thing in the *uterus* has the requiſite ſuppleneſs, and dilatability; as well with reſpect to the vermicular veſſels, and their orifices; as to the veins, the veinous *appendices*, and their extremities; in ſuch manner, that theſe ſeveral veſſels are filled, ſwelled, extended, opened, emptied, and recloſed together in the proper time and order. From whence it follows; 1ſt, That, in this ſtate, the *menſes* muſt begin to flow with facility, free from accident, and pain: becauſe the vermicular veſſels, and veinous *appendices*, fill, open, empty, and cloſe themſelves eaſily; and the mechaniſm of menſtruation muſt be performed without trouble; and, conſequently, without pain, or any accidents.

2dly, That the *menſes* muſt be, at the beginning, a little leſs copious: either, becauſe then the veinous *appendices* are not ſufficiently dilated; or their extremities not ſufficiently open; or the whole number not yet opened at all.

3dly, That the *menſes* muſt return a little later; and continue a ſhorter time: which reſults, either, from that the milky humours, which is leſs copious, fills more ſlowly, and in a leſs degree, the vermicular *appendices*; or, the veinous *appendices*, which have not acquired all the neceſſary flexibility, are dilated more difficultly; and of courſe more ſlowly, and in a leſs degree.

4thly, But that gradually, and in a ſhort time, every thing muſt paſs into regular order, with relation to the quantity, period, and duration of the *menſes*: and that theſe girls muſt have them, with perfect regularity, within the ſpace of ſix months, excepting any caſual accident.

This

This ſtate of the *uterus*, and its veſſels, is ſcarcely ever found, except in thoſe girls; 1°. Who are large and perfectly made; who never had, in their infancy, either ſwellings in the glands; ſcrophulous tumours; nor habitual diſorders, or infirmity; who have not been rickety; &c.

2°. Who have a ſanguine conſtitution, and a diſpoſition naturally gay and joyous; have fed wholeſomely, but ſimply; have not any obſtruction, either in the *uterus*, or any of the other *viſcera* of the *abdomen*; and in whom the ſtomach is good, and performs digeſtion well.

3°. In whom the *menſes* only begin to appear towards the fifteenth year, when the parts of the *uterus* have had time to acquire the diſpoſition neceſſary to yield itſelf to the operation of nature, without the eruption of the *menſes* being provoked before the due time, by hot medicines, touches, or laſcivious fancies.

4°. In ſhort, who have the breaſts already formed, which, as we have obſerved in the firſt chapter, evinces, with reſpect to the *uterus*, a ſimilar diſpoſition, that ought always to precede the firſt eruption of the *menſes*, in order that it ſhould be eaſy and natural.

SECOND STATE.

In this ſtate, the vermicular veſſels of the *uterus* being too compact, hard, and ſmall, reſiſt, on one hand, the entrance of the milky lymph; and, on the other, the veins of the *uterus*, and their *appendices*, being too ſmall, too firm, and too much compreſt by the cloſe and compact texture of the *uterus*, reſiſt, alſo, to the diſtenſion, which the blood ſhould produce there.

In comparing this ſtate with the known mechaniſm of menſtruation, it is eaſy to conceive; 1°. That the effort, which nature ſometimes makes in girls, in order to the eruption of the *menſes*, muſt be in vain: ſince there is nothing in readineſs, either with relation to the vermicular veſſels, which are not ſufficiently diſpoſed to be filled with the milky lymph, nor

nor with relation to the veinous *appendices*, which are not ſufficiently extended, to admit of being opened.

2°. That this effort of nature cannot even manifeſt itſelf in theſe girls, either by heavineſſes, ſwelling, or gripings in the *uterus*; or that, at moſt, theſe effects can be only ſlight: ſince the veſſels of the *uterus* are not tumefied; at leaſt not ſufficiently, to cauſe very ſenſible diſtenſions.

3°. But that it muſt appear, by many other accidents: which all depend, either on the quantity of milky lymph, that then abounds in the blood, becauſe it cannot be received in the vermicular veſſels; or on the quantity of blood which regurgitates, at that time, in the veſſels; becauſe it cannot be evacuated by the diſcharge of the *menſes*.

4°. That, on one hand, the milky lymph, by commixing itſelf with that which is ſeparated in the *veſiculæ* of the breaſts, and is of the ſame nature, increaſes the quantity of it; and thence gives riſe to the tenſion and tumefaction of the breaſts.

5°. That the ſame lymph, by combining with the *ſaliva*, diminiſhes it, and perverts even its action; which cauſes a diſguſt to common food; and the depraved taſte for odd things, known, among phyſicians, by the name of *pica* and *malacia*.

6°. That the ſame lymph, in uniting with that of the ſtomach, which ſerves as a ferment, weakens the effective qualities of it; and brings on frequent indigeſtions, of more than one kind; according to the nature of the food.

7°. That, on the other hand, the blood which is accumulated in the body, muſt diſtend, and cauſe a repletion in its own veſſels, particularly in the ſoft parts; which are, of courſe, in a ſtate of leſs reſiſtance.

8°. That this repletion, when it happens in the lungs, produces frequent oppreſſions and choakings; and ſometimes ſpittings of blood.

9°. That a ſimilar repletion in the inſide of the head, accordingly as it is made in the ſubſtance of the

the brain, or in its membranes; and as the blood is thicker or thinner; cauſes pains of the head, either gravid, or divulſive; faintings; watchings; convulſive motions; and epileptic fits.

10°. Finally, that ſuch a repletion in the coats, or the ſubſtance of the muſcles; or in the fat covering, which is under the ſkin; gives riſe to ſpontaneous laſſitudes and ſwellings of the feet in the day time, and of the face in the night.

This ſtate is uſual in girls; 1°. Who are of a dry conſtitution, in whom the texture of the ſolids is firm and cloſe; and who have the *uterus* little, denſe, and compact.

2°. Who have obſtructions in the *uterus*, or the *viſcera* of the *abdomen*; who have the blood infected with a ſcrophulous leven; and who have been rickety in their infancy, or ſubject to diſeaſes, or, at leaſt, infirmities.

3°. In whom the *menſes* are leſs produced by the diſpoſition of nature, than by the action of medicines adminiſtered improperly; or by handling, reading, or converſations tending to incite the paſſion of love.

4°. Finally, who have been ill fed; who have indulged the irregular appetite they may have had for odd things; and who have given way to a pleaſing reverie, which is the conſequence of their condition; or to an habitual melancholy; which is ſupported by real or chimerical diſappointments.

THIRD STATE.

In this ſtate, the vermicular veſſels are fitly diſpoſed to the entrance of the milky lymph, and are filled with it: but their orifices refuſe to open, that it may be diſcharged periodically: the veinous *appendices* dilate alſo; and are ſwelled by the ſtagnation of the blood, which the compreſſion of the vermicular veſſels obſtructs there; but their extremities do not unfold, nevertheleſs, to ſuffer it to be evacuated in the time of the *menſes*.

It is evident, 1°. That, in this ſtate, the girls will have all the accidents which precede and accompany the *menſes*: ſince the milk and blood-veſſels of the *uterus* are as full, as they are at the approach of them. Theſe accidents will be often even greater, and always more obſtinate, than in the common *menſes*: becauſe the plenitude of the veſſels is then often greater; and laſts always longer.

2°. That the girls will, in this ſtate, be greatly expoſed to vapours; and to ſuch as are truly hyſterical: becauſe, the painful ſenſations which are produced in the *uterus*, muſt produce convulſive motions in the different parts of the body, by the mechaniſm, which we ſhall explain in its proper place, in ſpeaking of the hyſterical paſſion.

3°. That in general this ſtate will bring on all the accidents, which happen in the ſecond ſtate, either as they take their riſe from the quantity of the milky lymph that abounds in the blood; or as they depend on the quantity of blood with which the body is replete; ſince, in this ſtate, the milky lymph and the blood muſt regurgitate, in the ſame manner, for want of paſſage.

4°. That this ſtate may particularly cauſe both varicous dilatations in the veinous *appendices*, in conſequence of keeping them too long, and too much dilated; and ſchirrous obſtructions in the vermicular veſſels, in conſequence of making the milky lymph ſtagnate in them too long a time: which muſt, at laſt, thicken there, and cohere to them.

This ſtate of the *uterus* is commonly found in girls; 1°. Who have naturally the orifices of the vermicular veſſels, and the ends of the veinous *appendices*, too much contracted, cloſe, and hard; which occaſions them to reſiſt too much to their expanſion.

2°. Who have the internal coat of the *uterus* too thick and denſe; which occaſions it to cloſe, too much, the orifices of the vermicular veſſels, and the ends of the veinous *appendices* which paſs through it.

3°. In

3°. In whom, though they have been for ſome time in the ſecond ſtate, the cavities of the vermicular veſſels, and veinous *appendices*, have been gradually dilated, by the effort of the milky lymph, and of the blood; but without letting their orifices yet give way to it.

FOURTH STATE.

In this ſtate, the vermicular veſſels are filled with the milky lymph; and the veinous *appendices* with blood; as in the third ſtate. All the difference is, that the extremities of theſe *appendices* open at laſt periodically, and diſcharge the blood into the *uterus*; while the orifices of the vermicular veſſels remain obſtinately cloſed, without ſuffering the lymph, of which they are full, to flow out.

From hence it is eaſy to ſee; 1°. That, in this ſtate, the *menſes* will be very copious: becauſe the vermicular veſſels, that continue always full, conſtantly compreſs the veins; which obliges the blood to turn in a greater quantity towards the open *appendices*.

2°. That the duration of the *menſes* will be longer than ordinary: becauſe the conſtant compreſſion of the vermicular veſſels will longer turn off the blood in the veinous *appendices*; and keep their extremities longer open.

3°. That the returns of the blood will be more frequent: becauſe the vermicular veſſels, which do not empty themſelves, keep the neighbouring veins in an habitual ſtate of compreſſion: which ſuffices to give riſe, ſhortly, to a new repletion of the lateral *appendices*; and to a freſh diſcharge of the *menſes*.

4°. That the *menſes* will degenerate often, in this ſtate, into a kind of flooding; and this ought to be apprehended, every time they flow more copiouſly, are longer protracted, or return more frequently than is proper.

5°. That, conſequently, ſuch girls muſt be in a ſhort time extremely weakned, emaciated, and faint,

by copious, long, and frequent *menſes*; which very often degenerate into an habitual flooding.

6°. That, on one hand, the milky lymph, not being able to be ſeparated in the vermicular veſſels, becauſe they are not emptied, muſt regurgitate into the blood; and draw on, by a neceſſary conſequence, all the accidents, which it has been already ſhewn to cauſe, in the ſecond ſtate; and which have been explained under Number 4, 5, &c.

7°. That it even ſometimes happens, the lymph retained in the vermicular veſſels thickens there, in conſequence of its ſtagnation; and cauſes in them ſchirrous obſtructions: as has been already obſerved, under Number 4, with relation to the third ſtate.

8°. Finally, That in a ſhort time, if theſe ſymptoms continue, ſuch girls muſt be affected with weakneſs; paleneſs; depravity of appetite; obſtructions of the *viſcera* of the *abdomen*; tumefaction of the extremities; and dropſies; even often, of that fatal kind in this habit of body, which the phyſicians diſtinguiſh by the name of *cachexy*.

Experience has taught us, that this ſtate happens, 1°. When ſo imprudent a conduct has been perſued, as to employ too ſtrong emmenagogue medicines to provoke the *menſes*, in the girls who are in the third ſtate: becauſe that then the blood, agitated by the effect of theſe medicines, forces the *appendices* to open; while the milky lymph, on which theſe medicines do not act with equal power, is not able to dilate, in the ſame manner, the orifices of the vermicular veſſels.

2°. When the girls, who are in the third ſtate, make efforts, or uſe exerciſe, that are too violent; or happen to have ſome attack of fever. For then, the motion of the blood, which is augmented by it, opens the extremities of the veinous *appendices*, without exerting its action, in the ſame manner, on the milky lymph of the vermicular veſſels.

3°. When the girls have naturally a colliquated, and acrid blood, which eſcapes readily through the extremi-

extremities of the *appendices*; or which makes itſelf a way out, by eroding them.

FIFTH STATE.

The fifth ſtate is nearly the reverſe of the fourth; that is to ſay, in this ſtate, on one hand, the orifices of the vermicular veſſels, at leaſt the greateſt number, open into the cavity of the *uterus*, and ſuffer the lymph to be evacuated there, as faſt as it is ſeparated; and without giving it the neceſſary time for dilating theſe veſſels; but on the other, the veinous *appendices*, which are not expoſed to any compreſſion, do not dilate and open; or, at leaſt, only a very few, are dilated and opened.

It may be readily concluded from thence; 1°. That, in this ſtate, there will be no *menſes* of a red colour: ſince the veinous *appendices* do not open; or, at moſt, there will be only very little; ſince there can be only very few of the *appendices*, which do open.

2°. That the *menſes* of a red colour, if they do appear, will only return periodically, with protracted intervals: becauſe there muſt be a longer ſpace of time, in order that the milky humour, which is loſt in ſo many places, may be collected in a ſufficient quantity, in the vermicular veſſels that contain it, to cauſe ſome of the *appendices* to tumefy, and procure ſome ſlight diſcharge of the *menſes*.

3°. That this ſuppreſſion, or at leaſt diminution, of the *menſes*, will not, however, occaſion either heavineſs, tenſion, or griping in the *uterus*: becauſe it does not ſuppoſe any repletion there, either in the blood-veſſels, or thoſe of the milky humour.

4°. But that this ſtate will be always accompanied with a diſcharge of the *fluor albus*; that is to ſay, with a diſcharge of the milky lymph, which the orifices of the vermicular veſſels ſuffer to flow out; and that this diſcharge will be continual, if the orifices of theſe veſſels remain conſtantly open; will ceaſe by intervals, if the orifices cloſe, from time to time; and will be more or leſs copious, according as theſe orifices will be

more or less open; or as the number of those, which may be open, will be greater or less.

5°. That, by the continuation of this discharge, especially if it be copious, the patient will be weakned, emaciated, lose her appetite, fall into languors, and at last into a *cachexy*, and all the consequences of it.

This state happens principally to girls, 1°. Who are of a phlegmatic habit; or who have their blood colliquated by some languishing disease, or by the immoderate use of medicines of a dissolving nature.

2°. Who have the fibres naturally lax; and the membranes formed of these fibres thin and weak; which occasions, that the internal coat of the *uterus*, in particular, has neither sufficient thickness, nor resistance, to keep the orifices of the vermicular vessels close to the degree that is requisite.

3°. Who have been early incited by touching, or frequent pressures of the body of the *uterus*; which has forced the orifices of the vermicular vessels before the due time, and by degrees intirely relaxed them.

COMPOUND STATES.

These states depend always on the concurrence of two, three, or four, of the simple states; which meet together at the same time in the *uterus*. As these kinds of combinations may be numerous, the number of these states must be great; and it would be a matter of difficulty to explain them in detail: but after what has been said before of the simple states, there will be no occasion to enter into this discussion.

It is sufficient to observe, 1°. That each of these compound states may be easily resolved into two, three, or four, simple states, which may serve to explain their accidents, and to establish their method of cure.

2°. That we may even, without taking this trouble, attend only to that state alone, which appears to predominate: because, in finding a remedy for this, a remedy is generally found for all the others, on account of the relation they have to each other; or, at least, the most momentous disorder of the *uterus* will be

be corrected, after which the others will ſcarcely reſiſt.

§. II. DIAGNOSTIC.

The firſt object of diagnoſtic regard ought to be, to diſtinguiſh the five ſtates of the *uterus*, that may be found in girls at the time of the eruption of their *menſes:* and the ſecond, to examine, as far as poſſible, what the cauſes are, which produced theſe ſeveral ſtates, or which conduce to ſupport them.

I. As to the *firſt* point, the nature of the accidents, which precede, or accompany the eruption of the *menſes*, ſuffices to indicate, in a manner ſufficiently certain, the interior ſtate of the *uterus*; provided they be properly attended to in that view.

1°. Therefore, every time we find girls, in whom the *menſes* are eſtabliſhed without pain, griping, or other accidents, we may be aſſured the *uterus* is in the *firſt* ſtate.

2°. When, after their breaſts are already formed, girls fall by degrees into all the accidents of the *chloroſis*, without having the *menſes*; and, moreover, without feeling either tenſion, weight, or pain in the *uterus*; it is a ſign the *uterus* is then in the *ſecond* ſtate.

3°. When the girls, who have not the *menſes*, any more than thoſe juſt before mentioned, although of the age of puberty; but who have, in a ſimilar manner, all, or almoſt all, the ſymptoms of the *chloroſis*; perceive, at the ſame time, tenſion, ſwelling, and gripings in the *uterus*, which come periodically: and that it happens to them, ſometimes, to have then a ſlight lymphatic diſcharge, milky and bloody; it is a criterion, that the *uterus* is then in the *third* ſtate.

4°. When the girls, in whom the diſcharge of the *menſes* is copious, long, and frequent, even ſo as to degenerate often into a kind of flooding, have at the ſame time ſeveral ſymptoms of the *chloroſis*, there is room to preſume, that the *uterus* is in the *fourth* ſtate.

5°. Finally, when the girls, instead of having their *menses* of a red colour; and in the proper quantity, and period; have, in their place, only a discharge of *fuor albus:* which sometimes ceases by intervals, and sometimes is continual; and which comes, or at least augments, sometimes irregularly, and sometimes periodically; it cannot be questioned but that the *uterus* is then in the *fifth* state.

II. For the *second* point, we can scarcely be certain of the causes which have given rise to the several states of the *uterus:* or which support them; unless by the sincere account, which the girls, or their relations, may give of every thing that has preceded. But they are often ignorant of, or have forgot the greatest part of the facts, which might give some light; and often chuse not to confess them. Most frequently, these states of the *uterus* depend only on the original conformation: wherefore, we are reduced to simple conjectures with respect to this part of the diagnostic. Happily, indeed, it is not of great consequence to be better informed: because it cannot have much influence on the choice of the medicines; which the known nature of the accidents, and the circumstances of the state of the *uterus*, on which they depend, sufficiently indicate.

§. III. PROGNOSTIC.

I. It is always advantageous, that girls should have the *menses* at the proper age; that is to say, towards the fourteenth or fifteenth year: and that they should come easily, and without accident; because the eruption that unites these circumstances saves the girls many inconveniencies, evinces a good constitution of the fibres of the coats and vessels of the *uterus*, and promises the most favourable disposition to fecundity.

II. It is therefore, by the reverse of these reasons, a misfortune for girls; that this first eruption fails of some of these circumstances; or, in other words, that the *menses* come too soon, or too late; that they are established with difficulty and trouble; or that they bring on injurious accidents. Besides, its being a criterion

almost

almoſt certain of a bad formation of the *uterus*, experience ſhews, moreover, that the girls, in whom this happens, are frequently expoſed to obſtinate infirmities: almoſt always ſubject to have laborious *menſes*; and moſt commonly leſs fit to bear children, particularly ſuch as are very healthful.

III. From hence it is eaſy to decide of the prognoſtic, that ſhould be made of the five ſtates, in which the *uterus* may be in girls, who have attained the age of puberty. The firſt which procures the *menſes* eaſily, readily, and free from accidents, is always advantageous. The four others, which fail each of ſome of theſe circumſtances, are all productive of ill, but not all equally ſo.

1°. The ſecond, where there is not any tumefaction either in the blood-veſſels, or the milk-veſſels of the *uterus*; and where the girls have, indeed, ſome ſymptoms of the *chloroſis*, but feel neither tenſion nor pain in the *uterus*; is the leaſt injurious of all: becauſe it ſuppoſes only a little too much denſity in the veſſels of the *uterus*, which is corrected gradually by age; brings on no accidents, but ſuch as are ſlight; and does not give occaſion, either to any dilatation in the blood-veſſels, or obſtruction in the milky veſſels.

2°. The third ſtate, where there is a tonic ſwelling in the milk-veſſels, and the blood-veſſels; and where the girls are ſubject, at the ſame time, to tenſions and gripings in the *uterus*, and to ſeveral accidents of the *chloroſis*, is yet more ſupportable than the two others: as well, becauſe this ſtate leads of itſelf almoſt always to a kindly eruption of the *menſes*; provided patience be had to wait the operations of nature, without ſeeking to anticipate them; as, becauſe the accidents that it cauſes are not attended with danger. For the obſtructions which may be formed in the veſſels, may be prevented with ſufficient certainty.

3°. As to the fourth and fifth ſtates, they are the moſt injurious: but nevertheleſs with ſome difference in relation to the judgment that ſhould be formed of them. For in general the fourth ſtate, where the *menſes* are

too

too copious, long, or frequent; and where they degenerate often into a kind of flooding; is the most dangerous: and the fifth, where there is a discharge of a white colour, and continual, or subject to frequent returns, is the most obstinate.

§. IV. CAUSES.

Of these five several cases, which may happen in the first eruption of the *menses*, the first is a perfectly natural state, which requires no medicines; and in which nothing is to be done, but to leave nature to herself. With regard to the four others, the second and third may be reduced to the suppression of the *menses*. The fourth does not differ from the excessive discharge of the *menses*, or flooding from the *uterus*: and the fifth agrees in every thing with the discharge of the *fluor albus*. To avoid repetitions, we therefore may, and indeed ought, to refer the method of cure, which may be proper to each of these cases, to the particular chapters where these three several diseases are treated of. At least, if we deviate from this method, it should be only with regard to the second, and the third cases, which are the most common: though even what we shall say regards less the particulars of the administration of medicines, on which we have no intention to expatiate here, than the rules of prudence, that should be observed, when there is occasion to aid the first eruption of the *menses*.

I. As, in these two cases, the principal cause, that retards the eruption of the *menses*, is the too great density of the substance of the *uterus*; and particularly of its vessels, as well those of the blood, as the milk; the first attention must be to relax and supple the texture of the *uterus*, by the use of *humectants*, *diluents*, and *emollients*, both internal and external.

In this intention, if the dryness of the skin, and the briskness of the pulse, require, and the state of the stomach permit it; we may order, 1°. Broths of chicken or veal; in which are boiled, roots of the yellow mallow, strawberry, or wild succory, of each one ounce;

ounce; and the leaves of borage, bugloſs, lettuce, and dandelion, each one handful: and we may add, in ſtraining them, a drachm of *ſal prunella*, or of chryſtal mineral.

2°. Aporems, or decoctions of the ſame roots, and leaves, nearly in the ſame proportions; adding to each doſe, half an ounce, or an ounce of ſyrup of violets, poppies, or water-lily.

3°. Weak emulſions ſtrained, or even boiled; which ſhould have each four drachms of melon-ſeeds, freed from the huſks, from which the milk ſhould be drawn with water of dog-graſs, or a weak decoction of barley; and to which may be added, ſome of the ſyrups juſt before mentioned.

But if, on the contrary, the pulſe be regular, and weak; and that the ſtomach does not ſeem to be in a condition to bear medicines ſo cooling; it may ſuffice to give well clarified whey, either ſimply, or infuſed on the better plants; as ground-ivy, ground-pine, germander, wormwood; or chalibeated by the repeated extinction of a bar of iron heated red hot. In caſes of neceſſity, the whole may be reduced to the ſole uſe of milk diſtilled in *balneo mariæ*, either without the addition of herbs, or with the plants that are cooling, or ſlightly vulnerary, according to the ſtate of the pulſe, or the quality of the blood.

But equally in either of theſe two ſtates of the pulſe, and ſtomach, a bath, or half-bath of warm river water muſt be uſed frequently, and repeatedly: into which the patient muſt go once a day, in the morning or evening, according to her choice: though where it is indifferent with reſpect to other things, bathing in the morning ſhould be always preferred. On the coming out of the bath, it will be the moſt fit time to take the broths, aporems, or emulſions, which it may be proper to order.

II. As the other cauſe, that contributes often to the retardation of the *menſes*, depends on the inſpiſſation of the blood, and the ſlowneſs of the circulation; which occaſions that the effort of the blood, that comes

into the veinous *appendices* of the *uterus*, is not sufficiently great, to surmount the resistance, and force them open; it is of consequence, as soon as the texture of the solids is relaxed, to employ opening, or dissolving medicines, known by the name of *emmenagogues*. But it is proper to begin always with the gentlest, and rise to the more powerful only by slow degrees, in proportion as the obstinacy of the disease requires it; and as there is room to believe it may be done with safety. I have thought it fit to enumerate them here, at least the most useful of them, according to this order; and to note the dose, in which each in particular may be employed.

Water impregnated with the rust of iron, *for common drink.*
Chalybeate wine, *in the dose of four ounces a day.*
Martial soluble tartar; *from eighteen grains to a scruple.*
Aperitive saffron of Mars; *the same dose.*
Steel filings porphyrised; *from fifteen to twenty grains.*
Æthiops mineral, or saffron of Mars with water; *the same dose.*
Tincture of steel; *twenty-five or thirty drops.*
Terra foliata tartari; from thirty grains to half a drachm.
Æthiops mineral prepared by heat; *the same dose.*
Galbanum, Sagapenum, Gum Ammoniac; *from eight to fifteen grains.*

With these medicines, by combining them in different manners, may be made, opiates, boluses, pills, lozenges, &c. according to the taste of the patient. But the following chapter, *Of the menses suppress or diminished*, may be consulted on this head: as the matter is treated of there much more particularly.

III. It often happens, that, instead of ordering alternately the humectants and diluents; and the dissolvents or aperitives; they are employed together to combine their action. In this case, may be given, 1°. Broths, prepared as has been directed in the preceding

article; in which a drachm of filings of rusty iron, or aperitive saffron of Mars, tied up in a rag, may be boiled; or half a drachm, or a drachm of *sal mirabilis Glauberi*; or of the *arcanum duplicatum*; or twenty grains of the soluble martial tartar dissolved; or from twenty to twenty-five drops of tincture of steel added.

2°. Aporems with the same herbs, or with wild succory; to which is added, in the same manner, the *sal mirabilis Glauberi*; *arcanum duplicatum*; martial tartar; or *terra foliata tartari*; or to which nothing more is done, than to suffer a ball of steel to be infused till it renders them black.

3°. Some well-clarified whey, in which is dissolved, twenty grains of martial soluble tartar; or with which is commixt, twenty or twenty-five drops of tincture of steel.

4°. It would be yet better, if the season be proper for it, to drink, either the mineral chalybeate waters; such as are common in all the provinces of this kingdom; but among which the most approved are those of Vals, Caransac, Camarets, Forges, &c; or the thermal purging waters; as those of Vichi, Bourbon, Balaruc, &c.

IV. To render the effect of these medicines more certain, the advantages of a good regimen should be joined to them. Therefore, 1°. The patient should not be suffered to take any but such food as is easy of digestion, and of good quality. Nothing should be allowed them, but what their stomach can easily digest: and they should be forbid all the other fantastical kinds, which their depraved taste suggests to them. By this means, the chyle, that will be more copious and more refined, will, on the one hand, increase the quantity of the milky humour; and, on the other, correct the thickness of the blood.

2°. The patients should be exhorted, at the same time, to use exercise on foot, to play, work, walk, dance, divert themselves, &c. to accelerate the circulation of the blood, diminish the spissitude of it, and

and make it pass with more force into the vessels of the *uterus*.

V. Finally, in the administration of medicines to bring down the *menses*, attention must be had, to avoid deviating from the following rules; which are in this point, as so many maxims of prudence.

1°. Not to attempt to hasten the eruption of the *menses*, either in autumn or winter: because the solids are then too close; and the fluids too thick: but to prefer always, when it can be done, the spring, or the summer.

2°. To esteem, as more certain, the aid of nature, whose operations are more safe whenever she acts, than that of the most boasted medicines; of which the effect is more uncertain and dangerous.

3°. Consequently to incite nature often, when she shall be too slow; but to incite her by gentle medicines, or, at most, such as are moderate: and, after having some time done this, to wait for and attend on her motions, for fear of bringing on any injurious accident, by forcing the vessels to open by violence.

4°. To employ scarcely any but moderate purges, though at the hazard of being longer in curing the patients. For, in this disorder, they are always soon enough cured, when they are well cured. At least, if strong purges or emetics be employed, to know how to employ them properly: on which matter, the following chapter may be consulted.

5°. To join antiscrophulous medicines with the dissolvents, and emmenagogues, in all the cases where there is reason to suspect there may be in the patient any scrophulous ferment, that occasions the thickness of the blood and lymph.

6°. To neglect nothing during the time of waiting till the *menses* are established, either to strengthen the stomach, and promote digestion; or to correct, or diminish the accidents of the *chlorosis*. We may, in this intention, advise the use of wine at meals; of water impregnated with rust of iron; and of the cold infusion of rhubarb; direct some glasses of decoction

of

of wormwood in white wine; or of juniper-berries in water: or give faſting the extract of juniper, or bark; or ſome drops of quinteſſence of wormwood; *elixir proprietatis*, without acid; or a ſpoonful of diſtilled *elixir proprietatis*, called vulgarly *Garus*, mixt with a ſpoonful of wine, or of orange-flower water.

7°. To introduce properly bleeding; and in the different manners, according to the ſtate, and the wants of the patient. That in the foot is ſometimes deciſively effectual, when every thing with regard to the *uterus* is ready; and there is nothing further requiſite than to increaſe the velocity of the blood, which paſſes into its veſſels. This caſe is indicated by a moderate tenſion of the *uterus*, joined with a ſlowneſs and ſmallneſs of the pulſe. On the contrary, it is detrimental, when the repletion is ſo general in the *uterus*, that the veſſels, by compreſſing each other, become mutual obſtacles to their dilatation. It is proper then to bleed in the arm: and this the famous caſe recited by Riviere: of which the ſymptoms are, the fulneſs and quickneſs of the pulſe, joined to a painful tenſion of the *uterus*. Excepting this, at leaſt when no particular accident renders it neceſſary, great circumſpection ſhould be obſerved in the uſe of bleeding in the arm, in caſes of retardation of the *menſes*.

8°. Finally, to recommend marriage, as a reſource almoſt infallible for girls in whom the *menſes* come difficultly. For the moſt part, nothing is more efficacious to eſtabliſh and augment the *menſes*. In all caſes, the firſt pregnancy and delivery finiſh what coition alone could not effect, by dilating, extending, and opening all the veſſels of the *uterus*; as well thoſe of the blood as milk.

Medicines uſed to promote the firſt eruption of the menſes.

I. Frequent uſe is made of the following lozenges. Take of common ſugar, four ounces; boil it in a ſufficient

ficent quantity of common water, which is about a pint, to half the quantity of ſyrup.

Add then of cinnamon powdered, three grains; and of ſteel filings porphyriſed, half an ounce.

Boil the whole into the conſiſtence of a conſerve; ſpread it upon a table; and, when it is cold, part it into ſixteen equal lozenges.

One of theſe lozenges muſt be given in the morning faſting; and if the diſeaſe be conſiderably preſſing, another in the afternoon, four hours after dinner: drinking each time, upon it, a diſh of tea; or a glaſs of ptiſan.

The uſe of theſe lozenges may be a long time continued: becauſe they have nothing in them too powerful. But as they are not cathartic, the patient muſt take purges from time to time.

II. To avoid this trouble, other lozenges are prepared ſomewhat ſimilar to them, in the form which follows; but a little purgative.

Take of the leaves, or follicles, of ſena, two drachms.

Boil them in a pint of common water; and having ſtrained the decoction, add to it four ounces of ſugar; half an ounce of powdered cinnamon; and an ounce of aperitive ſaffron of Mars, in powder likewiſe.

Boil the whole to the conſiſtence of a conſerve; and having ſpread it on a table, duſted with a little cinnamon or ſugar powdered, part it into ſixteen lozenges.

Theſe lozenges are given according to the directions for the preceding: except that they are not to be taken in the afternoon; leſt the patient be expoſed to a purging in the night.

They are purgative, as appears; but only in a gentle degree. If it be judged they are not ſufficiently ſo, two may be given in the ſame morning, with the interval of an hour betwixt them: or the doſe of ſena may be augmented, when they are made anew.

CHAP.

CHAP. IV.

Of the menſes *ſuppreſſed or diminiſhed.*

§. I. DESCRIPTION.

THE *menſes* are ſuppreſſed, when they fail intirely to appear at the time they ought to come. They are diminiſhed, when they flow leſs copiouſly, for a ſhorter time, or more ſeldom.

To adopt the expreſſions eſtabliſhed by uſage, the ſuppreſſion of the *menſes* may be *natural*, *unnatural*, or *præternatural*. It is *natural*, in women, who have attained to the forty-fifth, or fiftieth year of their age: and in whom it is conſiſtent with the order of nature, that the *menſes* ſhould ceaſe. It is *non-natural* in women who are pregnant, and thoſe who give ſuck: in whom it is, in the ſame manner, as natural, that the *menſes* ſhould be ſuſpended. It is *præternatural*, in the women, in whom the *menſes* fail to appear, without their being pregnant, giving ſuck, or being yet of the age to be exempt from them. This laſt caſe, is the only one when the ſuppreſſion of the *menſes* is a diſeaſe: and it is conſequently of that alone we take upon us to treat here. We ſhall not, nevertheleſs, omit, by enumerating all the poſſible cauſes of ſuppreſſion, to point out thoſe which produce the two other kinds: but in ſo doing, care will be taken to intimate, that they do not relate to the caſe properly treated of.

With reſpect to the diminution of the *menſes*; as there are three things to be conſidered in their diſcharge, the quantity, duration, and frequency, it is evident, that the *menſes* may diminiſh in ſeveral manners.

1°. By one alone of theſe ways in particular; as when they are leſs copious, do not continue, or come more ſeldom. 2°. By two of theſe ways together; as when they are leſs copious, and continue a ſhorter

time; are leſs copious, and return ſeldomer; or return more ſeldom, and continue a ſhorter time. 3°. By all theſe ways together; as when the *menſes* are leſs copious, continue a ſhorter time, and come more ſeldom in the ſame perſon.

§. II. CAUSES.

I. *Menſes ſuppreſſed.* It follows from the mechaniſm of menſtruation, which we have before eſtabliſhed in the preceding chapters, that all the cauſes of the ſuppreſſion of the *menſes* muſt be referred to three ſeveral claſſes: of which the *firſt* regards the vermicular veſſels of the *uterus*, that do not become ſufficiently full to compreſs the veins which lie near them: *the ſecond*, the veins of the *uterus*, and the veinous *appendices*; which, although, compreſt, do not inlarge enough to open: and the *third*, the blood, which does not paſs into theſe veins, eſpecially the *appendices*, with ſufficient force to make a way through their extremities. We ſhall examine methodically each of theſe claſſes.

I. Several cauſes may occaſion, that the vermicular veſſels of the *uterus* are not enough filled with the milky lymph; and do not dilate ſufficiently, to compreſs the veins and the neighbouring *appendices* to the degree that is neceſſary for menſtruation.

1°. If theſe veſſels are naturally too little, hard, or denſe, to be able to admit of the entrance of the lymph. It is true, this diſpoſition of the veſſels, when it ariſes from the original conformation, may well hinder, or retard the firſt eruption of the *menſes* in girls. And moreover, when it is the inevitable conſequence of age, it may cauſe their ceſſation in women advanced in years, and make them ceaſe for ever: but as it can ſcarcely be ever renewed by intervals, it can ſcarcely ever take place in women who have already had the *menſes*; and who ought naturally to have them again.

2°. If theſe veſſels, or at leaſt the greateſt part of them, are either ſtopt by obſtructions produced by the lymph

lymph which is thickened; as in the ſchirruſſes of the *uterus:* compreſt by a repletion of the blood-veſſels; as in the inflammation of this part: or eroded by ſuppuration; as in the ulcers of the ſame: theſe three are real cauſes which often produce the ſuppreſſion of the *menſes.*

3°. If the milky lymph be not furniſhed to theſe veſſels; or at leaſt is not ſufficiently copious to fill them; which happens; 1°. When it is deficient in the blood; as in women waſted away, or recovering from illneſs: though this only produces a ſuppreſſion without accident. 2°. When it is diſſipated by hard work, loſs of blood, or frequent purgings; though this can ſcarcely produce a perfect ſuppreſſion: 3°. When it is furniſhed to ſome other part; as to the breaſts in women who give ſuck: though this produces only a *non-natural* ſuppreſſion. 4°. When it is evacuated elſewhere, as in an habitual flux of the belly; and in the hæmorrhages almoſt continual: though this only produces an imperfect ſuppreſſion; or, at leaſt, ſuch as is without accident.

4°. If the milky lymph, in proportion as it enters into the vermicular veſſels, and ſeparates there, flows out again, and is diſcharged into the *uterus* by the orifices of theſe veſſels which are too open, and too much dilated; as in the habitual diſcharge of the *fluor albus*, that is always followed by the ſuppreſſion of the *menſes*, when all the milky lymph eſcapes from its veſſels.

II. There is nearly the ſame number of cauſes capable of hindering the veins of the *uterus*, and the veinous *appendices*, although compreſt, from ſwelling and elongating themſelves ſo as to open.

1°. The reſiſtance of their coats; which, in conſequence of being too hard, refuſe to the expanſion. But this cauſe, which is a defect of conformation, or a conſequence of age, can only relate to the firſt eruption of the *menſes* in girls, or their intire ceſſation in women advanced in years; and can never bring on

the caſual ſuppreſſion of the *menſes*, in women who have ever had them.

2°. The preſence of a fecundated *ovum*, which fills the cavity of the *uterus*; hinders the veinous *appendices* from elongating, and opening; or at moſt does not permit them to elongate and open, except in the *placenta*; which produces a ſuppreſſion of the *menſes*; but ſuch as is *non-natural*; and general in pregnancy.

3°. The induration of the ſubſtance of the *uterus*, particularly its internal coat; which, by cloſing the veinous *appendices*, prevents their dilating; as in ſchirruſſes of the *uterus*, eſpecially when they are very large.

4°. The convulſive conſtriction of the body of the *uterus*; which cloſes, and ſtrangulates ſuddenly the veinous *appendices:* and which is cauſed; 1°. by a cold that ſeizes the body; particularly the feet, joints, &c: 2°. by any fit of paſſion; or any great or unforeſeen vexation: 3°. by any quick and ſtrong impreſſion of fear. Theſe are the three common cauſes, which ſtop the *menſes* ſuddenly in the time they flow; and of which we ſhall preſently have occaſion to ſpeak more amply. They all act on the *uterus* by a mechaniſm, we ſhall endeavour to explain below, in ſpeaking of the hyſterical paſſion; but which is in general the mechaniſm of all convulſive contractions, that depend either on the paſſions of the mind, or on ſympathetic effects.

III. As to the cauſes which prevent the blood from paſſing into the veins of the *uterus*, and the veinous *appendices*, with ſufficient force to make a way through their extremities, we muſt deduce them all,

1°. From that the blood paſſes in too ſlowly; which happens becauſe the heart, contracting ſlowly and weakly, can only communicate to it a ſmall degree of velocity: as in perſons who are ill, weak, or languiſhing: or becauſe its ſpiſſitude hinders its receiving the whole impulſe of the heart, as in all other caſes where the blood is thick. 2°. From

2°. From that the blood enters there in too ſmall a quantity: which happens, becauſe it is deficient in the body from inanition, waſting, diſeaſe, &c: or becauſe it is derived elſewhere, by blood-letting in the arm, ſuffered improperly; or by bleeding at the noſe too frequently.

3°. From that the blood enters there, both too ſlowly, and in too ſmall quantity, at the ſame time: which happens from the concurrence of the cauſes laid down in the two laſt caſes.

IV. Such are the three claſſes of cauſes which give riſe to the ſuppreſſion of the *menſes*, each in particular, when they are ſimple; that is to ſay, when there is only the milky veſſels, veinous *appendices*, or the blood, in fault. But it may happen, and does ſo ſometimes, that theſe different claſſes concur either two at the ſame time; or even all the three together, on account of the cloſe affinity betwixt the antecedent cauſes, which may produce them: and then it may be eaſily conceived, the combination of theſe united cauſes muſt produce ſuppreſſions of the *menſes*, both more great, and more obſtinate.

II. *Menſes diminiſhed.* The *menſes* may be diminiſhed in three manners: as has been already mentioned: by becoming leſs copious; laſting a leſs time; and returning more ſeldom.

I. The *menſes* are leſs copious; 1°. When the lactiferous veſſels are only half filled; and conſequently compreſs the veins with only a ſmall degree of force: which occaſions, every thing elſe being equal, that the greater part of the blood continues to follow the direct way, without turning into the lateral *appendices*. *See* the firſt claſs of cauſes above.

2°. When the veinous *appendices* open only half way, or that there is only one part of theſe *appendices* which open at all; in ſuch manner that, all other things being equal, the orifices from whence the blood is diſcharged are leſs open; or there is a leſs number of ſuch as are open. *See* the ſecond claſs of cauſes above.

3°. When the blood passes in less quantity into the vessels of the *uterus*, or that it enters with less velocity: which occasions, that every thing equal, in all other respects, the blood must flow then less copiously. *See* the third class of the causes above.

II. The *menses* continue a shorter time; 1°. When the lactiferous vessels, by emptying themselves more quickly, sooner cease to keep the veins compress: which occasions that the direct course of the blood is sooner open again. *See* the first class of causes above.

2°. When the veinous *appendices*, which have been open, close themselves too soon: either, because they are less open, or have more power of resilition. *See* the second class of the causes above.

3°. When the blood is accumulated only in small quantities in the vessels of the *uterus*: either, because it is deficient in the body, or derived elsewhere. *See* the third class of the causes above.

III. The *menses* come more seldom, 1°. When the lactiferous vessels are only filled late, to the necessary degree, to procure menstruation. *See* the first class of causes.

2°. When the veinous *appendices* resist a long time to their dilatation, and do not yield without difficulty to being opened. *See* the second class of causes.

3°. When the blood, which is deficient or weakly propelled, cannot, under a long time, have force to dilate, and open the veinous *appendices*. *See* the third class of causes.

IV. It is easy to infer from hence, that it is only necessary to combine these several causes two to two, or three to three, to account for the other more compound cases, which happen in the diminution of the *menses*: as when they are less copious, and continue a shorter time; less copious, and return seldomer; return seldomer, and continue a shorter time; or even, at the same time, less copious, of shorter duration, and return seldomer.

§. III. DIFFERENCES.

Obſervation agreeing in this point with the theory, we have above eſtabliſhed, proves; I. That there is a ſuppreſſion, which is made ſuddenly, and ſtops the *menſes*, even in the time they flow: and another, of which the cauſes act by ſlow degrees; and which, without ſtopping the *menſes*, prevents them only from returning.

The ſudden ſuppreſſion, which ſtops the *menſes* in the time when they flow, is cauſed by the convulſive conſtriction of the body of the *uterus*. It happens in women, who in the time of their *menſes* expoſe themſelves to cold, wind, or rain; put their legs in cold water; walk barefoot on the pavement, or floor; are ſeized with any terror or alarm, or any exceſſive joy; abandon themſelves to any ſtrong paſſion of anger; or give way to any violent exceſs of grief. *See* Claſs II. Number 4. Theſe ſeveral cauſes produce their effects in a higher degree, in proportion as the paſſions of the ſoul, or the action of cold, are more powerful; and they happen moſt to thoſe perſons, who are leaſt accuſtomed to them; or who are naturally moſt ſenſible of them.

The ſuppreſſion which is made by degrees, and without ſtopping the *menſes* during the time they flow, only prevents their return, depends on a great number of cauſes compriſed in the enumeration we have before made. But it is eaſy to perceive, that they act only ſlowly, and by a gradual effect.

II. That there is a ſuppreſſion with a diſcharge of the *fluor albus*: which ſeems to ſupply the loſs of the red *menſes*, and a ſuppreſſion that is abſolute, and without any *fluor albus*.

The ſuppreſſion with the *fluor albus* is that particular kind, where the vermicular veſſels of the *uterus* ſuffer the milky lymph to eſcape through their too open orifices, in proportion as it is ſeparated. *See* Claſs I. Number 4.

The ſuppreſſion without any *fluor albus* comprehends all the other kinds, where the vermicular veſſels, deſigned to ſeparate the milky lymph, do not ſuffer any of it to eſcape; whether they be full or not.

III. That there is a ſuppreſſion without either pain or tenſion in the *uterus*, and a ſuppreſſion with pain and tenſion in this part: and often with many other inconveniencies.

The ſuppreſſion is without pain and tenſion in the *uterus*, when the vermicular veſſels, and veinous *appendices*, are not ſwelled. *See* Claſs I, the whole: Claſs II. Number 1 and 3: and Claſs II. Number 2.

The ſuppreſſion is, on the contrary, with pain and tenſion in the *uterus*, when theſe veſſels tumefy: particularly the veins and veinous *appendices*; of which the tumefaction cauſes a fulneſs and tenſion more great, and more univerſal. *See* Claſs II. Number 4. and Claſs III. Number 1.

IV. Finally, that there is a ſuppreſſion without pain and tenſion in the *uterus*, in which the patients are exempt from all inconvenience, but ſome accidents of the *chloroſis*.

The ſuppreſſion without pain and tenſion in the *uterus*, or any other inconvenience, happens from that the vermicular veſſels do not tumefy; becauſe the milky lymph is deficient in the blood, or derived elſewhere. *See* Claſs I. Number 4.

The ſuppreſſion made without pain or tenſion in the *uterus*, but in which the patient ſuffers the accidents of the *chloroſis*, is cauſed in the ſame manner, as the precedent kind; from that the vermicular veſſels do not tumefy: but what makes the difference is, that then this default of tumefaction is not occaſioned, as in the preceding caſe, by the milky lymph's being deficient in the blood, or derived elſewhere; but becauſe it cannot gain admiſſion into the cavities of the vermicular veſſels; as they are then denſe, cloſe, or ſtopt up. *See* Claſs I. Number 1 and 2.

§. IV. SYMP-

§. IV. SYMPTOMS.

As there are ſuppreſſions of the *menſes* of various kinds, it reſults, that the ſymptoms, which occur in this diſeaſe, vary in proportion. Theſe are the principal of ſuch variations.

I. If the ſuppreſſion of the *menſes* takes its riſe from that the milky lymph does not come to be ſeparated in the vermicular veſſels of the *uterus*, becauſe it is deficient in the blood; or derived elſewhere. *See* Claſs I. Number 3. In this caſe,

1°. The women will perceive neither tenſion, nor pain in the *uterus*; becauſe there is not any tumefaction.

2°. There will not be any kind of diſcharge; becauſe nothing can run either from the vermicular veſſels, which will be empty; nor from the veinous *appendices*, which will not be dilated.

3°. There will not be the leaſt injury done to any function; at leaſt none ſuch as can be attributed to the default of the *menſes*; becauſe, in this caſe, the ſuppreſſion detains nothing in the blood that ought to be evacuated. From whence it reſults, that in women who give ſuck; or are diſeaſed; or juſt recovering from illneſs; the *menſes* are often deficient, even ſeveral times ſucceſſively, without their perceiving the leaſt inconvenience from it.

II. If the ſuppreſſion of the *menſes* has for its cauſe the impoſſibility of the milky lymph's being ſeparated in the vermicular veſſels; not becauſe it is deficient, as in the former caſe; but becauſe theſe veſſels are not in a ſtate to receive it, on account of their being cloſed, or ſtopt up.

1°. This lymph will ſoon ſurcharge the blood: becauſe there will be daily a freſh quantity produced there, without having any way, by which it may be evacuated.

2°. In conſequence of accumulating there, it muſt be commixt in the breaſts with their lymph; that is much

much of the ſame nature; which will occaſion a ſwelling and tenſion of them.

3°. It will be even compelled at length to mix with the ſalival lymph; and that of the ſtomach; that are analagous to it, although in a leſs degree; which will produce even different likings for odd things; and conſequently different kinds of *pica* and *malacia*, according to the different degree of acidity, or acrimony, that this lymph will have contracted.

4°. It will reſult at laſt, that by the odd things which are eaten, or by the bad digeſtion of the wholeſome aliment, the ſtomach will be in a ſhort time overloaded; from whence will riſe *nauſea*, riſings of the ſtomach, heart-burn, vomitings, &c.

III. If the ſuppreſſion of the *menſes* be cauſed by the diſcharge of the milky lymph, which eſcapes from the vermicular veſſels as faſt as it is ſeparated; and without being detained there. *See* Claſs I. Number 4. In this caſe,

1°. There will not, any more than in the preceding, be either tenſion or pain in the *uterus:* becauſe there will be no tumefaction in the blood-veſſels or lactiferous veſſels.

2°. But there will be a diſcharge of the milky lymph, or of the *fluor albus*, more or leſs copious, continual, or periodical, according as the vermicular veſſels ſhall have their orifices more or leſs open; and as theſe openings ſhall be conſtant, or variable.

3°. This diſcharge brings on an itching, irritation, and heat in the *vagina*, and the *vulva*, more or leſs great, according as the humour which is diſcharged is more or leſs acrid.

IV. If the blood fills, and tumefies the veins and the veinous *appendices* of the *uterus*; and the ſuppreſſion of the *menſes* ariſes only from that the orifices of theſe *appendices* refuſe to open. *See* Claſs II, and Claſs III, the whole.

1°. In this caſe, the patients will perceive a tenſion, pain, and heat in the *uterus*, more or leſs great, according to the degree of repletion.

2°. This

2°. This pain will become often ſtrong enough, to merit the name of *uterine colic*. It will ſometimes ſeize the whole of the *uterus*; and ſometimes only a part of it; according as the repletion may be more or leſs general.

3°. This tenſion, and ſwelling, communicate themſelves not only to the ligaments, as well broad as round, of the *uterus*; but alſo to the *vagina* and *vulva*, by means of the veſſels which are common to both. Wherefore the patients muſt feel, in this caſe, all the ſymptoms, which uſually foreſhow the approach of the *menſes*, and in a greater degree.

4°. After ſome days of ſuffering, every thing will diminiſh gradually without any ſenſible diſcharge: becauſe the milky lymph, in conſequence of dilating its veſſels, will open at laſt, although with difficulty, a paſſage into the lymphatic veins, that ſpring from them: which will cauſe theſe veſſels to empty themſelves; to ceaſe to compreſs the veins; and to give, at laſt, to the blood the liberty of circulating as uſual.

5°. But this ſucceſs is to be expected, only, when the milky lymph is ſufficiently liquid to be capable of being intirely taken up by the lymphatic veins. Whenever it may be thicker, and there may remain in the vermicular veſſels a ſufficient quantity to keep them tumefied, the veins of the *uterus* will continue to be compreſt; and conſequently the tumefaction of the *uterus*, and the other enumerated ſymptoms, will ſubſiſt alſo; but in a degree more weak, and proportionable to the quantity of the milky lymph, that will be retained in the vermicular veſſels.

6°. At length the continuation of the ſuppreſſion of the *menſes* will bring on an univerſal *plethora:* but which will be chiefly perceived in the *thorax*; where it will cauſe choakings, difficulty of breathing, coughs, palpitations of the heart, &c: and in the brain; where it will give riſe, for reaſons which are mentioned in Chapter II. §. V. to pains of the head, either gravid

or divulsive; watchings or dosings; frightful dreams; waking in starts, &c.

7°. If the course of the blood should be then obstructed in any part, where there may be any weak vessel; or the texture of any part should be slight, lacerated, eroded, &c; it may happen, that the blood will find a vent there; and cause a kind of periodical hæmorrhage: as it proves when the *menses* undergo a deviation.

V. In all cases of suppression, where the *uterus* is tumefied, extended, heated, and painful, on account of the repletion of its vessels. *See* Classes I. and II, the whole.

1°. The patients will suffer all the accidents of the hysteric passion, for the reasons that will be explained in the chapter, where this disease will be treated of.

2°. These accidents will be more or less great, and more or less frequent, according as the sensations that shall be produced in the *uterus* will be more or less strong; last a longer or shorter time; and return oftner or seldomer.

3°. Moreover, these sensations in the *uterus* will cause, by a consequence of the law of sympathies, that will be explained in speaking of the hysterical passion, convulsive contractions in the fibres of the organs of taste; which would be sufficient to deprave that sense; even if the *saliva* should not be at all altered; and there is an instance of this in the sudden change, which acute pains produce in the faculty of tasting.

4°. The same sensations will cause also, at the same time, by the same law of sympathies, convulsive contractions of the fibres of the stomach, diaphragm, and muscles of the *abdomen*; even when the stomach may contain nothing else that can irritate it: and there is an instance of this in the vomiting, which the acute pain of the kidneys excites in the *nephritic colic*

VI. If the *menses*, in the time when they flow, happen to be stopt suddenly, by the convulsive closing of the *uterus*. *See* Class II. Number 4.

1°. There

1°. There will happen, in this caſe, attacks of the hyſterical paſſion, greater, longer, and more frequent, than in any other kind of ſuppreſſion: becauſe the ſenſations then excited in the nerves of the *uterus*, whether from the blood-veſſels in which the blood, that is ſuddenly detained there, regurgitates; or from the muſcular fibres which are in an *erethiſmus*, or violent ſtate of contraction, will be ſtronger, longer, and more frequent.

2°. There will ſupervene, in the ſame caſe, many other frightful accidents; as faintings, lethargies, loſs of memory and ſpeech, *deliriums*, palpitations of the heart, choaking fits, &c: which all, in the ſame manner as the hyſterical paſſion, depend on convulſions or convulſive motions of different parts.

3°. The number, duration, and violence of theſe accidents, will vary, according to the copiouſneſs with which the *menſes* flowed when they were ſtopt, the time of diſcharge they had had; the facility with which they had flowed; the natural ſenſibility of the *uterus*; the age, and conſtitution, with reſpect to *plethora*; the ſtate of blood of the patients; &c.

§. V. DIAGNOSTIC.

I. Nothing is more eaſy than to be informed of the ſuppreſſion of the *menſes*: ſince the patients may reveal it themſelves. But when the ſuppreſſion happens by ſlow degrees, and without any manifeſt cauſe, nothing is more difficult than to diſtinguiſh, whether it be the conſequence of pregnancy; and of courſe want no medicinal treatment; or be cauſed by a diſeaſe, which does require the uſe of remedies.

Where married women are in queſtion, this difficulty is leſs embarraſſing: for they are commonly the firſt to imagine themſelves pregnant. Their judgment in this matter muſt not, nevertheleſs, be always confided in: for there are ſome ſufficiently dull or weak not to have the leaſt ſuſpicion of their being with child, at the time they are ſo.

But

But the difficulty is infinitely greater, when girls who have never been married, or young widows, are the object. Their ſtate ought naturally to place them out of the reach of all ſuſpicion: but, unluckily, experience informs us too frequently, that an excels of confidence would, in many inſtances, be imprudent. Sometimes they may be ignorant of their being pregnant, when they deſire medicines to make their *menſes* return; but, more frequently, they only deſire theſe medicines, in order to hurt themſelves, and to eſcape from a ſtate of embarraſment.

If it be mortifying for a phyſician to be led into imprudent meaſures by the levity of a married woman, who expoſes her offspring to danger; it is infinitely ſcandalous to render himſelf, by his ignorance, the accomplice of the wickedneſs of an unmarried girl, or widow, who endeavours to deſtroy theirs. In order to avoid theſe deplorable extremities, there is only one ſafe way; that is, to be attentive to the following criterions, that are the moſt certain; and above all things to perſue the conduct we are going to point out.

1°. In pregnancy, the freſhneſs and colour of the complexion are commonly preſerved; whereas in the ſuppreſſion of the *menſes*, that ariſes from diſeaſe, the face is almoſt always pale, thin, and diſcoloured. But this criterion affords ſcarcely more than a meer preſumption; for there are many women, who are as pale, and thin, in the firſt months of their pregnancy, as if their *menſes* were ſuppreſſed from any other cauſe.

2°. In pregnancy, the orifice of the *uterus* is exactly cloſed: whereas it is not ſo, or but ſlightly, in the ſuppreſſion of the *menſes*, occaſioned by any diſeaſe. This fact is very true; but beſides, that few think it proper to make the examination; or dare even to propoſe it; there muſt be a ſkill gained from experience in this matter, in order to diſtinguiſh the difference, ſometimes very ſlight, which there is in the mouth of the *uterus*, in theſe two ſtates.

3°. In

3°. In pregnancy, the accidents, which accompany the ſuppreſſion, ceaſe commonly towards the third or fourth month: becauſe then, the *fœtus* begins to conſume, for its nouriſhment, enough of the milky lymph and blood, to prevent them from regurgitating. Whereas theſe accidents increaſe towards that time, by the continuation of the diſeaſe, in the ſuppreſſions of the *menſes* that are againſt nature. This criterion is more evident, and more certain, than the two preceding: and it would be ſtill more ſo, if we could confide in the repreſentations of the patients: but girls, and yet more women who have experience, are able, by falſe accounts, to impoſe, in this point, on phyſicians who have the credulity to believe them.

4°. Finally, in pregnancy, the *uterus* riſes with a point towards the navel, at the fourth or fifth month: and we may then diſtinguiſh its figure; and the extent of its volume, of which the circumſcription is perceivable. In preſſing it, the reſiſtance of the body which is uneven, is felt: and moreover, if it be handled ſome time, and ſhaken gently, particularly with a very warm hand, the *fœtus* being ſtirred, and wakened as we ſay, by the motion, and heat, ſtretches, moves, and renders itſelf capable of being diſtinguiſhed. When theſe proofs are had, there is no more doubt of pregnancy, whatever the perſon may be, in whom they are found: but, alſo, every time that theſe criterions are wanting, at the fourth or fifth month, in reckoning from the time the *menſes* have been ſuppreſt, it may be concluded, the ſuppreſſion ariſes then from a real diſeaſe, for which remedies ſhould be adminiſtered.

As it is the only certain criterion in theſe matters, a ſkilful phyſician muſt regulate his conduct by it. Thus, unleſs infallible reaſons remove all danger of being deceived, which rarely happens, he ought always to defer the efficacious treatment of the ſuppreſſion of the *menſes* for four or five months; that is to ſay, till ſuch time as he can, by the examination of the *abdomen* of the patient, render it clear to himſelf, whether ſhe be pregnant

nant or not. The reaſons of this conduct may be even explained to married women, who acquieſce readily in it, and approve it. If, however, there happen, during this delay, any preſſing inconveniencies, they may be relieved by regimen, and by the uſe of ſome ſtomachics, or gentle aperitives; which cannot, in any caſe, do harm.

With reſpect to unmarried girls, and young widows, to whom decorum does not admit of ſhowing the ſuſpicions that may be entertained, it is always proper to make them believe, that meaſures are perſuing to bring back the *menſes:* but inſtead of doing it, nothing ſhould be ordered, but ſtomachics, abſorbents, and bitters; that is to ſay, innocent medicines. The more they ſhow of eagerneſs to complain of the little ſucceſs of theſe medicines; and the more importunate they are to obtain others more efficacious; the more they ought to be ſuſpected; and the more it is proper, promiſing them, at the ſame time, a change, to perſevere invariably in this conduct, till there may be, at the fourth or fifth month of the diſorder, certain proofs, that there is no pregnancy. In which caſe, without appearing to make any change, efficacious medicines muſt be begun to be given to them.

II. Another difficulty preſents itſelf with regard to thoſe women, who approach their forty-fifth, or fiftieth year. According to the order of nature, they ceaſe to have their *menſes* at that age. Wherefore, very far from endeavouring then to make them return when they diſappear, it is proper, on the contrary, to think of the means of aſſiſting nature in her due courſe; and of conſidering only how to put ſuch patients into a condition of diſpenſing with the loſs of this evacuation. Unhappily there are women, who do not believe themſelves enough advanced in age, to loſe their *menſes*; and who, in deceiving themſelves, deceive their phyſicians. There are ſome alſo who may indeed have ſome ſuſpicion of the truth, but in conſequence of that, only take the greater care to conceal it from others; and who, in this fantaſtical

notion, ſeek, with yet greater earneſtneſs, to impoſe on their phyſicians.

Such are, for the moſt part, the victims of their folly, or caprice: for by ſtriving to bring back the *menſes*, which ought to be intirely gone; and to force nature; they often occaſion floodings; habitual *fluor albus*; or, what is yet more dangerous, inflammations, ulcers, or cancers in the *uterus*. But, after all, the blame theſe women may incur, does not juſtify the phyſicians, who have been imprudent enough to be influenced in their practice by their word. The ſevere rules of their profeſſion ordain them to take all precautions againſt artifices, that ought to be known to them. We may, even in faces the leaſt impaired, judge pretty nearly of women who aſk advice; and if we ſuſpect they have attained their forty-fifth year, we ſhould, without liſtening to their demands, or being moved by their complaints, preſcribe to them only ſtomachics, diluters, and abſorbents; or, in other words, ſuch medicines as are proper only to diminiſh the accidents of the ceſſation of the *menſes*; or, at moſt, aperitives, diſſolvents, and very gentle emmenagogues: that is, medicines which may aid nature, if any extraordinary cauſe hinder her operations; but which cannot do violence to her, in caſe age is bringing on a natural ceſſation of the *menſes*.

Moreover, the delay of ſome months affords, at the proper period, a certainty on this head: and it is then the right time to have recourſe to the uſe of emmenagogues; and to employ the methods of cure propoſed in this chapter; if it be diſcovered, the ſuppreſſion complained of, ariſes from any diſeaſe. But if, on the contrary, there be conviction, it is natural, all the contrary precautions ought then to be taken, to endeavour for a remedy to the bad conſequences, this change may produce in ſome women: but it is not our buſineſs to enter into the detail of this here: and the laſt chapter of this book, where what regards the ceſſation of the *menſes*, and the in-

conveniencies that may be brought on by it, are amply treated, may be consulted on this head.

III. When a certainty is obtained, with respect to the nature of the suppression of the *menses* that is in question, there is nothing more required, than a moderate attention to discover of what kind it may be; and from what cause it arose.

1°. Every suppression is either suddenly made; and stops the *menses* in the time when they flow; or comes on gradually; and prevents the *menses* from returning at the due period.

But we have already observed, that the sudden suppression is always caused by the convulsive contraction of the *uterus*, occasioned by exterior cold, particularly of the legs; or some violent passion; as joy, grief, fear, &c.

2°. Every suppression, which happens gradually, gives rise, or not, to a discharge of the *fluor albus*.

But it has been shewn, that the suppressions, which are attended with a discharge of the *fluor albus*, either periodical or habitual, arise from the relaxation of the orifices of the vermicular vessels of the *uterus*; which suffer the milky lymph to escape as fast as it is separated.

3°. Every suppression without *fluor albus*, is, or is not attended with pain, and tension, in the *uterus*.

But it has been already proved, that the suppressions, which are without any discharge of the *fluor albus*, but in which the patients feel tension, pains, or colic, in the *uterus*, must always have for their cause, either the faulty state of the *uterus*, of which the internal coat, and the veinous *appendices*, being too dense, or close, prevents them from dilating, and their *appendices* from opening; or some defect with relation to the blood, which is too thick, in too small quantity, or impelled too weakly, to conquer the resistance of the veinous *appendices*, and force them to open.

4°. Every suppression of the *menses* where there is neither *fluor albus*; nor pain, or tension, in the *uterus*;

rus; either does not bring on any inconvenience; or leads on gradually the accidents of the *chlorosis*.

But it has been already mentioned, that the suppressions without *fluor albus*, pain, or tension, in the *uterus*; or any other inconvenience; depend always on the deficiency of the milky lymph in the blood; as in women wasted away, or just recovered from any illness; or who undergo great labour, or give suck.

5°. Finally, every suppression without *fluor albus*; and without pain, and tension, in the *uterus*; but, in which the patients fall gradually into the greatest part of the accidents of the *chlorosis*; results from that the milky lymph, which abounds in the blood, cannot be separated in the vermicular vessels of the *uterus:* because they are too little, dense, or close; or because they are stopt up; which occasions it to regurgitate into the blood; and to mix with the *saliva*, and *leven* of the stomach; of which it alters the purity; and vitiates the effects.

IV. As to the more remote causes, which may give rise to each of these immediate causes, and contribute thus to bring on the different kinds of suppression, they are scarcely to be distinguished, but by an exact account of the particulars of the habit, regimen, conduct, &c. of the patients: and they should be examined as to all these points, though, to say the truth, this information should tend less to the forming a judgment on the nature of the medicines proper to be employed, than to determine the changes that should be made in their manner of conducting themselves.

§. VI. Prognostic.

There are too many kinds of suppression of the *menses*, to admit of the establishing a prognostic, which might equally regard all. It is necessary, therefore, to enter into a detail, and to enumerate, in particular, what is proper to each kind.

I. The suppression, which is not attended with any tension, or pain, in the *uterus*; nor with any disorder

in any of the functions of the body; is not of itself any way dangerous.

II. The suppression which does not draw on any inconveniencies, except some accidents of the *chlorosis*, has not any other danger attending it, than that of the *chlorosis*; and this danger varies according to the degree or obstinacy of the disease.

III. The suppression, with a discharge of the *fluor albus*, is obstinate, difficult to cure, and sometimes dangerous. It may bring on a slow fever, consumption, *leucophlegmacea*, dropsy, ulcer, and cancer of the *uterus*, when the discharge of the *fluor albus* is copious and continual; or when the humour is very acrid.

IV. The suppression, where the *uterus* is subject to tumefactions, tensions, and acute and frequent pains, is always dangerous; and often followed, when it continues, with inflammation, abscesses, ulcers, *schirrus*, and cancer of the *uterus*; &c: and these accidents are more or less to be dreaded, according as the pains of the *uterus* are more or less continual, acute, &c.

V. The suppression, which causes an universal *plethora*, terminates always, when it is of long continuance, in lethargies, apoplexies, asthmas, palpitations of the heart, obstructions of the *viscera* of the *abdomen*, dropsies, vomitings of blood, &c: and these consequences are to be apprehended, in proportion as the patients are naturally more plethoric by habit, or regimen.

VI. The sudden suppression, which stops immediately the discharge of the *menses*, excites the most quick, violent, and sometimes momentous storms. It is then the patients are sometimes instantly struck with an apoplexy, or seized with a lethargy; find themselves choaking; suffer strong palpitations of the heart; spit or vomit blood; become phrenitic, or maniacal; have strong attacks of convulsions, or convulsive motions; fall into the excess of the hysteric passion in the most frightful manner; and even sometimes die from the violence of these accidents. It is

there-

therefore, with regard to this kind of ſuppreſſion, more than any other, that we have reaſon to ſay, [1] the *uterus* is the cauſe of an infinite number of diſeaſes in women.

VII. In general, the more the ſuppreſſions of the *menſes* are of a long ſtanding, the more they are difficult to be cured: becauſe the length of time they have continued, proves, that the cauſes which produced them, were inſurmountable, or muſt render them ſo. Nevertheleſs, Hippocrates relates, that he has ſeen cures performed on women, whoſe *menſes* were ſuppreſt, not only for ſix months; after which time the author of the book, *De morbis mulierum* [2], gives up all hopes of cure; but even for four [3], and even ſeven [4] years. It is indeed, true, theſe inſtances are very rare; and ſhould not be conſidered as affording any rule of judgment.

VIII. In general, the more the ſuppreſſions of the *menſes* are difficult to be cured, the more they are dangerous; becauſe it is to be feared, there is no means of avoiding the fatal conſequences, which are threatened by the continuance of the diſeaſe.

IX. In general, ſo long as the ſuppreſſion endures, a barrenneſs of the patient is to be expected. I am not, however, ignorant, there are ſome inſtances of women, who have become pregnant without having their *menſes:* but theſe inſtances are not common: and, moreover, the facts have been obſerved in women, who might not in reality have the *menſes*; but who had the *uterus* in a right condition; which cannot be ſaid of the women, in whom the *menſes* are wanting, through the effects of any diſeaſe.

X. In general, when it may happen, that theſe women conceive, we have little room to flatter ourſelves, they will go to their time, or be delivered of

[1] It is thus that they have made Democritus ſpeak, in a pretended letter to Hippocrates, found in their works of him. Τῶν ἐν γυναικὶ μόχθων μυρίων παραιτίη μήτρη. Uterus ſexcentarum ærumnarum cauſa eſt in mulieribus.

[2] Lib. i cap. 3.

[3] *Epidem.* V. circa initium.

[4] *Epidem.* IV. 92.

healthful children: becauſe the blood-veſſels and milk-veſſels of the *uterus*, which are not in a condition to furniſh the lymph and blood for the *menſes*, cannot furniſh them for the nouriſhment of the infant during nine months, in the proportion that is requiſite.

§. VII. *Method of cure.*

It has been ſhewn, that there are two kinds of ſuppreſſion of the *menſes:* the one, which may come ſuddenly, in the time that they flow; and ſtop them all at once: the other, that which may come gradually; and without ſtopping them during the time they flow, only prevent their return. As theſe two kinds differ from each other, both with reſpect to cauſes and conſequences; ſo they demand a different treatment, that renders it neceſſary, to make them two ſeparate articles.

Of the ſuppreſſion of the menſes *which happens ſuddenly during the time they flow.*

I. If the patient has been affected by any violent paſſion, or ſeized with any terror; the firſt attention muſt be to moderate the impreſſion which is made on her; of what nature ſoever it may be; and to endeavour to compoſe her ſpirits. But if ſhe has been indiſcreetly expoſed to cold, means muſt be taken to warm her again, as quickly as poſſible.

II. In both caſes, ſomething ſhould be given her of a ſpirituous nature; as wine, balm water, *l'eau des Carmes*, or compound balm water, water of the ſix ſeeds, orange flower water, or *garus*, &c. There ſhould be put under her noſe, ſome ſtrong antihyſterical odour, as the *ſal volatile oleoſum*, volatile *ſal Ammoniac*, volatile ſpirit of urine, or *ſal Ammoniacus*; or ſhe ſhould be made to ſnuff up the fumes of feathers, hair, leather, horſe's hoof, or of a little blue ribbon. At the ſame time, ſhe ſhould undergo frictions of the thighs, with hot linnen cloths.

III. Haſte

III. Haſte ſhould be alſo made, to dip both the feet in warm water; with which may be mixt, if there be time and convenience, a decoction of leaves of rue, feverfew, mugwort; or ſome other antihyſterical plants.

IV. If that be not ſufficient to bring back the *menſes*, there ſhould be no heſitation to bleed the patient copiouſly in the foot, without delay; which ſhould be even repeated four hours after, if the violence of the accidents, particularly the choakings, palpitations of the heart, pains of the head, fainting fits, convulſive motions, hyſterical paſſion, &c. require it.

V. There ſhould be given to the patient, every hour, a cupful or two of a weak infuſion of leaves of mugwort, balm, feverfew, ſage; the vulnerary herbs of Swiſſerland; or even ſimple tea.

VI. There ſhould be given, by intervals, a ſpoonful of an antihyſteric potion; to which has been added a doſe of anodyne tincture, to quiet the ſpaſmodic contractions, which are the only cauſe of the diſeaſe, and the accidents. The taking this potion may be more or leſs urged, according to the exigence. It may be ordered nearly according to this form.

℞. *Aquar. Artemiſiæ & Meliſſæ* āā ℥ij *quibus diſſolv.*
Boracis Venetæ, ʒß.
Theriacæ veteris, ʒj.
Add. aq. Cinnamom. hordeatæ. ℥j.
Tinct. anodyn. gut. xxx.
M. F. Hauſtus, ſumendus ex cochleari.

VII. But if the violence of the accidents demand ſomething more antihyſterical, or active, the following pills may in that caſe be preſcribed.

℞. *Aſſæ fœtidæ & caſtorei* āā *gr.* ix.
Salis volatilis viperarum, gr. xii.
Laudani opiatici, gr. iii.
M. F. Maſſa, dividenda in pilulas æquales probè deaurandas.

The patient must swallow one or two of these pills every hour, till the accidents begin to abate: and she must take after them a cup of the infusion, which has been directed above, Number 5.

VIII. If the patient continue too long in a lethargic fit, or violent convulsions, notwithstanding the bleeding in the foot be even repeated, it must then be determined to give her four or five grains of soluble tartar emetic, in a dose of the antihysteric infusion of Number 5. This is the only way to disengage the brain; and it is often, at the same time, the means of opening the veins of the *uterus*, and of removing effectually the suppression.

IX. If the discharge of the *menses* be well restored by these several aids, the patient will be cured, and there will nothing more remain to be done, than to watch her recovery. But, if the *menses* do not appear again, or that they appear unduly, and in an imperfect manner, from that time proper medicines may be begun to be used, in order to bring them back: on which head consult the next article. Nevertheless, it seems to be more prudent, to wait the whole month, when there is no urgent accident. For indeed a determination can scarcely be well made to come to a treatment in form, but by the state of the *menses* at the first time of their return.

X. So long as the patient suffers under violent accidents, she should not have any nourishment given her: because it would have no tendency, but to load the stomach: if it happen, nevertheless, that the disease continues long, there is no dispensing with the omitting to give her broth at the regular times. But so soon as the accidents are gone, or abated in their force, there may be added to the broth, jellies, rice boiled in broth, yolks of fresh eggs, &c; and to go on by degrees even to a more strong diet.

Of the ſuppreſſion, which, without ſtopping the menſes *while they flow, only prevents their returning at the due time.*

This kind of ſuppreſſion comprizes four caſes. The *firſt*, where, inſtead of the *menſes*, there is only a diſcharge of the *fluor albus*. The *ſecond*, where the ſuppreſſion is not followed with any inconvenience, either with relation to the *uterus*, or to the reſt of the body. The *third*, where the patients do not feel any diſorder in the *uterus*; but where the accidents of the *chloroſis* inſenſibly come on. The *fourth*, where they are ſubject to tenſions, pains, and colics in the *uterus*; and a great number of other bad ſymptoms. The firſt of theſe caſes does not require any other remedies than thoſe which are proper for the *fluor albus*; and conſequently the chapter of this book, where the *fluor albus* is treated of, muſt be conſulted.

Although the *ſecond* caſe urges leſs than any other, on account of its not producing of itſelf any accident; nevertheleſs, as it brings on barrenneſs ſo long as it laſts; and more eſpecially, as it is to be apprehended, that if it be ſuffered to continue too long, the ſubſtance of the *uterus* may become at length too cloſe and too compact; prudence requires it ſhould not be neglected.

It has been ſhewn, that this kind of ſuppreſſion never comes, except from the deficience of the milky lymph in the *uterus*; as in women who are waſted, diſeaſed, juſt recovering from illneſs, &c: or from the diſcharge being made by ſome other way; as in an habitual flux of the belly, the piles, bleedings and purgings too often repeated; &c: from whence it follows, that the intentions, by which it may be propoſed to be relieved, are,

1°. To increaſe the quantity of chyle and blood, by an analeptic or reſtorative diet, nouriſhing the patients with food eaſy to be digeſted; making them eat three meals, and even four, if their ſtomachs can bear it;

it; giving, every day, either a diſh of chocolate, or ſome biſcuits dipt in ſack; or ſome freſh eggs; or a draught of milk, if the ſtate of the ſtomach will permit it.

2°. To baniſh all the medicines that conduce to the waſting the ſtrength; as bleeding, purgings, and even glyſters; unleſs inconveniencies more real, and momentous, render the uſe of them indiſpenſible.

3°. To ſtop, by the moſt proper methods, the evacuations, by which the blood is more and more impoveriſhed, and loſes a too great quantity of milky lymph: ſuch as looſeneſſes, ſweats, bleeding at the noſe, &c.

4°. Finally, to oblige the patients to lead a ſedentary, and ſtill life, at leaſt for ſome time; to lie long in bed; and, in a word, to keep themſelves, if they can, in a kind of paſſiveneſs both of body and mind; in order to diminiſh the diſſipation that is made by perſpiration.

As to the *third* and *fourth* caſes, as theſe two kinds of ſuppreſſion are real diſeaſes, they require alſo effective medicines. Thoſe which are proper to them may be reduced to three principal claſſes: becauſe it is evident, by the theory we have eſtabliſhed, there are only three principal intentions of cure to be effected.

The Iſt, to relax, and ſlacken the too cloſe and denſe texture of the *uterus*, its coats, and its veſſels.

The IId, to increaſe the effort, with which the blood paſſes into the veſſels of the *uterus*; and to render it ſufficiently great to force them to open.

The IIId, to incite the opening of theſe veſſels, by procuring, through every proper means, frequent concuſſions, or ſlight convulſions in the *uterus*.

I. The firſt of theſe intentions is performed by different methods, which tend, nevertheleſs, all to the ſame end; and of which the effect is nearly the ſame. We ſhall enumerate them in a few words, and methodically; beginning with the moſt familiar.

1°. Broths

1°. Broths of chicken and veal, with cooling and emollient herbs; as roots of the yellow mallows, wild ſuccory, bugloſs, dandelion, lettuce, harts-tongue, and ſpleenwort; the four cold ſeeds; &c; in which is diſſolved, a dram of *ſal prunellæ*, or chryſtal mineral.

Cooling aporems made with the ſame roots, leaves, and ſeeds; in which is diſſolved, in the ſame manner, a dram of chryſtal mineral, or half a dram of purified nitre; and to which is added an ounce of ſyrup of maiden-hair, violets, ſuccory, or yellow mallows.

Whey well clarified, in the doſe of eight, or ten ounces; in which is diſſolved, twenty, or twenty-four grains of the *ſal mirabilis Glauberi*; and which is chalybeated, by quenching a red-hot iron in it; an ounce of ſimple ſyrup being alſo added.

The mineral ſteel, and vitriolic waters; as thoſe of Caranſac, Spa, Forges, Camarets, Paſſy, &c. which muſt be drunk in the proper ſeaſon, for a fortnight, three weeks, or a month, with the uſual precautions.

2°. Cooling and emollient glyſters, with warm river water, the decoction of bran, clarified whey, or the decoction of the leaves of mallows, yellow mallows, *acanthus*, wall-pepper, mercury, beet, mullein, &c; linſeed, the four cold ſeeds, &c; in which is diſſolved a dram of *ſal prunellæ*; and to which is added, one or two ſpoonfuls of vinegar, or an ounce of honey of violets, oil of lily, pulp of *caſſia*, &c.

3°. Warm baths, or half baths, of ſoft water, particularly river water, that muſt be uſed in the morning for an hour, or ſomewhat leſs; and which muſt be continued for twelve or fifteen days; and repeated from time to time, according to the exigence: or there may be added, if thought proper, the decoction of the emollient herbs; as mallows, yellow mallows, *acanthus*, wall-pepper, mullein; or of ſome handfuls of linſeed, or the four cold ſeeds, bruiſed.

4°. Emollient fomentations upon the hypogaſtric region, with a flannel, or a ſoft napkin folded in four doubles, and dipt in a decoction of the plants juſt before mentioned. The flannel, or napkin, muſt be ſtrongly

ſtrongly preſt, that it may not give diſguſt; and it is to be applied hot on the belly; and renewed as ſoon as it is cold: which is to be repeated for an hour or two every day.

5°. The vapour that ariſes from an emollient decoction; which may be received by means of a perforated chair, for half an hour, or an hour: renewing the decoction when it is too cold, to afford the vapour. In order to carry this vapour further, a kind of funnel is ſometimes employed; but, in that caſe, caution muſt be obſerved, with relation to the heat of the vapour; and if the decoction be very hot, the pipe of the funnel muſt not immediately touch the veſſel, which contains it.

6°. Bleeding in the arm, repeated with moderation. It is very proper, in order, by emptying the veſſels, to ſlacken the *uterus*, when it is too much tumefied by the repletion of the blood; as happens ſometimes in plethoric women: which is always ſhewn by the tenſion, and conſtant pain they feel in the *uterus*, even at other times, as well as that of the return of the *menſes*. This is the caſe obſerved by [1] Riverius: and it is in that alone, the bleeding in the arm may be uſeful: for ſuch bleeding always does harm in every other caſe of ſuppreſſion: which ought to be conſidered as the foundation of a rule in this matter.

7°. Narcotics; as the ſyrup of *diacodium*, or *de karabe*; laudanum; anodyne tincture; pills of hounds-tongue; of each a proper doſe. Theſe medicines are ſpecific in all caſes of general contractions, *erethiſmus*, or convulſive conſtriction of the *uterus*. They are alſo proper, even when there is too much denſity: becauſe nothing diminiſhes more efficaciouſly the over great reſiſtance of the fibres, than to ſuſpend or check the courſe of the animal ſpirits, that ſupport the tenſion. Theſe medicines have likewiſe the property of dividing and attenuating the blood; and may more-

[1] *Obſervat.* Cent. i. Obſerv. 2.

over,

over, by that means, tend to cauſe the return of the *menſes*; for as to the notion, that they ſtop them, it has been a long time exploded.

8°. Emollient injections in the *uterus*, diſtinguiſhed by the name of *metrenchytes*. They are formed of an emollient decoction, more or leſs ſtrong: which is forced gently into the *uterus*, by a ſyringe made for that purpoſe: of which the *cannula* has an elbow, terminated with a round button, and pierced with ſeveral ſmall holes, in form of an holy-water ſprinkler. Care muſt be taken, when it is uſed, to inject the decoction when it is only of a gentle degree of warmth; ſuch nearly as the natural heat of the body; to make theſe injections, if it can be done, in the cavity of the *uterus*; and to place the patient, when they are performed, in the moſt favourable poſture for retaining them ſome time; that is to ſay, at leaſt a quarter of an hour. But to declare the truth, this practice is almoſt out of uſe; not only, becauſe it is indecent; but alſo becauſe it requires ſkill to be executed without ſome danger; and that, after all, it is of little ſervice, where the injection does not enter the *uterus*; as is ſeldom the caſe.

Nearly the ſame judgment may be given on the emollient peſſaries which were formerly in uſe. They were made of the leaves of emollient plants, boiled in water, cut very ſmall, or reduced into a paſte; and tied up in a piece of fine linnen; or with the decoction, or the juice of the ſame plants, imbibed by cotton, lapt up in a piece of clean linnen; or by a ſimple roll of half-worn linnen. But it is ſeldom, that any body cares to meddle with them at preſent.

II. In order to effect the ſecond intention, diſſolving, attenuating, aperitive medicines, muſt be employed; and particularly thoſe, which, from their ſuppoſed ſuperior efficacy, they call *emmenagogus*; or, in other words, ſuch as provoke the *menſes*: though, perhaps, they ſcarcely merit this title, or at leaſt, not by any preference ſo remarkable. The ſeveral medicines of this claſs are taken from the three kingdoms, to wit,

from the vegetable, the animal, and the mineral: and ſome are ſimple, and others compound. I ſhall enumerate them in due order; beginning with thoſe moſt gentle, and moſt uſed of each kind: which I ſhall obſerve to mark by a *: and I will point out, at the ſame time, the uſual doſe of each to be taken at once: after which I ſhall take notice, in how many manners, and under how many forms, they may be employed.

VEGETABLES.

ROOTS.

*	Of Round and long birthwort.	Half an ounce, or an ounce, in decoction.
*	— Madder, *Rubia tinctorum.*	
	— Pennyroal, *Pulegium.*	
	— Parſley.	
*	— Petty whin, *Bruſcus.*	
	— Angelica.	
*	— Aſparagus.	
	— Maſterwort.	
	— Smallage, *Apium.*	
*	— Eringo, *Eryngium.*	
*	— Reſtharrow, *Ononis.*	
	Of Cyperus.	In decoction, from two drams to four. In ſubſtance, from half a ſcruple to a ſcruple.
	— Gladiole, *Iris noſtras.*	
	— Valerian.	
	— Gentian.	
	— White briony, *Bryonia.*	
	— Cyclamen.	
	— Black hellebore; half a dram in decoction.	
	— Cuckow-pint, *Arum.* In powder, from a ſcruple to two.	

LEAVES.

*	Of white horehound.	In decoction, from half a handful to a handful.
	— Pennyroyal.	
	— Dittany of Crete.	
	— Rue.	
	— Marjorum.	

* Of

* Of Feverfew.
* — Southernwood.
* — Mugwort.
* — Cat-mint.
— Calamint.
— Origanum.
* — Tanſie.
— Balm.
— Sage.
— Roſemary.
— Mercury.
* — Germander.
— Arbor vitæ.

In decoction, from half a handful to a handful.

FLOWERS.

* Of Roman camomile.
* — Feverfew.
* — Melilot.
— Roſemary.
— Lavender.

In decoction, from one dram to three.

* — Oriental ſaffron, from ten grains to twenty in ſubſtance, reduced to powder: a ſmall pinch in infuſion.

SEEDS.

Of Nigella.
— Rue.
— Hartwort.
— Seſile of Marſeilles.
— Aniſe.
— The Cretan carrot.
— Fennel.
— Skirret.
— Lovage.
— Water-creſs.
— Smallage.
— Cummin.

In decoction, from a dram to two.
In ſubſtance, from half a dram to a dram.

BERRIES.

* Of the Bay-tree. In decoction, from a dram to two: in ſubſtance, from half a dram to a dram.

* Of

* Of Juniper, from two drams to half an ounce, in decoction.

SPICES.

* Mace. In ſubſtance, from ten grains to fifteen.
Nutmeg. In ſubſtance, from fifteen grains to twenty.
* Cinnamon. In ſubſtance, from half a ſcruple to a ſcruple.

BARKS.

* Of the Tamariſk. Infuſion, from a dram to three.
* — The Caper tree. In powder, and in ſubſtance, from half a dram to a dram.
* Jeſuits bark. A dram in ſubſtance; and two drams in decoction.

GUMS, OR RESINS.

* Myrrh.
* Aloes.
Opoponax.
} In ſubſtance, from ſix grains to half a ſcruple.

Aſſafetida.
Gum Ammoniacus.
Sagapenum.
Galbanum.
} In ſubſtance, from ten grains to half a dram.

ANIMALS.

* Caſtor.
* Millepedes.
Prepared horſe's teſticles.
} In ſubſtance, from ten grains to half a dram.

MINERALS.

Amber.
Borax.
Sal Ammoniacus.
} In ſubſtance, from half a ſcruple to half a dram.

COM-

COMPOUND MEDICINES.

GALENICAL.

*	Waters of Mint.	From one ounce to two.
	——— Pennyroyal.	
*	——— Feverfew.	
*	——— Mugwort.	
	——— Southernwood.	
*	——— Wormwood.	
*	——— Rue.	
	——— Horehound.	
	——— Sage.	
	——— Madder.	
	——— Tanſy.	
*	Vinegar of ſquills.	From half an ounce to an ounce and half.
*	Oximel of ſquills.	
*	Syrup of Horehound.	From an ounce to an ounce and half.
	——— Calamint.	
*	——— Five opening roots.	
*	——— Mugwort.	
	——— Hyſſop.	

CHEMICAL.

Tinctures.

*	——— Of Oriental ſaffron.	From ſix drops to fifteen.
*	——— Myrrh.	
*	——— Caſtor.	

Salts.

*	Soluble martial tartar.	From a ſcruple to a dram.
*	*Sal mirabilis Glauberi.*	
*	*Arcanum duplicatum.*	
*	*Terra foliata tartari.*	

Opening preparations of ſteel.

* Aperitive ſaffron by ſprinkling.	From ſeventeen grains to half a dram.
* ——— ——— With ſulphur.	
* ——— ——— With water only.	

Preparations of mercury not purgative, or gently ſo.

* Æthiops mineral prepared by heat.	From ten grains to eighteen.
* ——— ——— Prepared by trituration.	
* Mercurial *Panacea.*	

* Cinnabar, from ſix grains to ten.

Theſe are the medicines the moſt approved in the ſuppreſſion of the *menſes*. It is eaſy to vary the manner of adminiſtring them, according to the particular intentions that may occur; or even to the palate of the patients. For they may be either prepared in broths, decoctions, apozems, potions, juleps, ſyrups; or in compound powders, opiates, boluſſes, or troches.

1°. The *broths* are made with a chicken, drawn and ſkinned: or with half a pound of ſlices of veal: or with a neck of mutton, or lamb: which are to be boiled in a ſufficient quantity of water. There is to be added, towards the end, two or three kinds of the roots; each in the quantity of half an ounce, or an ounce; and the leaves of two or three ſorts of the herbs, each in the quantity of an handful. The roots ſhould be boiled longer than the leaves. The broth is to be ſtrained at laſt; and either ſome kind of ſalt, or ſome preparation of ſteel, muſt be diſſolved in it, in a proper quantity. The uſe of theſe broths muſt be continued for fifteen or twenty days.

2°. The *decoctions*, or *apozems*, are prepared nearly in the ſame manner: except that no fleſh is put into them;

them; and that there is added to them, after they are ſtrained, ſome proper ſyrup, in the quantity of an ounce. The uſe of them muſt be continued for fifteen or twenty days, in the ſame manner, as that of the broths: and ſometimes they may even be taken twice a day.

3°. As to the *potions*, two or three kinds of diſtilled waters, ſuch as may be proper, muſt be choſen, each in the quantity of an ounce and half, or two ounces; or, in default of them, the decoction of two or three plants, ſuch as may be beſt approved of, in the quantity of five ounces. Some proper ſalt muſt be diſſolved in it; or ſome aperitive preparation of ſteel, in which is mixt the powder of ſome emmenagogue roots, or plants: and there muſt be added ſome electary; as the *theriaca*; the *confectio hyacinthi*; or of kermes; or ſome tincture; as thoſe of caſtor, myrrh, aſſafetida, &c. Theſe potions are ordered by ſpoonfuls; which are to be repeated every half hour, according to the exigence of the caſe.

4°. The *juleps* do not differ from the *potions*; except that leſs ſalts, or powders, are employed in them; and that ſome ſyrup is always added: and the whole is to be taken at one time, once or twice a day, according to the neceſſity.

5°. If the officinal ſyrups, that are to be found in the ſhops, be not thought ſatisfactory, any magiſteral ſyrup, approved of, may be prepared, by making a ſtrong decoction of the roots or leaves of the emmenagogue plants, that may be choſen; to which a proper quantity of ſugar being added, it is then to be boiled to the conſiſtence of a ſyrup. This ſyrup may be employed in the apozems, juleps, and opiates, that are ordered.

6°. The *powders* are Galenical preparations, the moſt ſimple. There are choſen among the emmenagogue roots, leaves, ſeeds, barks, gums, &c. two or three of thoſe that are thought moſt efficacious. They are pounded, and paſſed through a ſieve: and then the quantity of each neceſſary for a doſe is taken

out and mixt together: and by which means a doſe of powder is obtained, that ſhould not weigh, however, more than two ſcruples, or a dram. This powder is taken, diluted in ſome broth, apozem, or a few ſpoonfuls of wine.

7°. The *opiates* differ from the powders, only by the honey, ſyrup, or conſerve, made uſe of to incorporate them; and to make a kind of electary, a little thickiſh. They are taken in a wafer; and ſome broth, or a doſe of apozem, to moiſten them in the ſtomach, muſt be given after them.

8°. The *boluſſes* reſemble perfectly the opiates; and differ from them, only in that they are of a thicker conſiſtence. The pills are prepared, alſo, in the ſame manner; and are yet harder: becauſe they are more charged with gums, or roots. The pills, and boluſſes, are taken in the ſame manner, and with the ſame precautions, as the opiates: but generally they are gilt after they are formed; in order to the rendering them more eaſy to be ſwallowed.

9°. Finally, the *lozenges*, or *paſtels*, are prepared, by diſſolving any quantity of ſugar in ſome diſtilled water, or proper decoction, by mixing with the ſolution ſuch powders as are judged proper; and by boiling the whole to the conſiſtence of a thick ſyrup. When the boiling is finiſhed, this mixture is ſpread on a marble table, and cut into paſtels, or lozenges, of the ſize proper for a doſe.

III. Different methods may be uſed to effect the third intention; that is to ſay, to procure the opening of the veinous *appendices* of the *uterus*, by the increaſe of the effort of the blood, which paſſes thither; or by the concuſſions, motions, and contractions of the body of the *uterus*.

1°. Bleedings in the foot, that by augmenting the velocity with which the blood deſcends into the trunk of the inferior *aorta*, augments, alſo, that with which it flows into all the branches of this trunk; and conſequently into the uterine arteries. This is the method, the moſt quick, and ſafe, to provoke the

the *menſes*. But to render it very efficacious, it muſt be employed in the time when the return of the *menſes* ought to be expected; and even, if it can, in the time when the tumefaction and tenſion of the *uterus* evince, that every thing is ready for the eruption: and nothing wanting to determine it, but a little more force in the impulſe of the blood; which there is reaſon to hope for from bleeding in the foot.

The application of cupping-glaſſes on the foot, or thighs; or an opening made by a cauſtic under the ham; were formerly ſubſtituted in the place of bleeding in the foot: but the action of theſe remedies is too ſlow, and uncertain, to deſerve that any great ſtreſs ſhould be laid upon them. It is at preſent believed, that the end of bleeding in the foot may be anſwered, by dipping the feet in hot water; in which, ſometimes, even emmenagogue plants are diſſolved: and it is true that this expedient may be of ſome ſervice: but it cannot be conceived that it ſhould ever have the ſame efficacy as bleeding in the foot.

2°. Glyſters made with the emmenagogue plants, and flowers; as feverfew, mugwort, pennyroyal, horehound, ſabine, &c; the flowers of camomile, melilot, lavender, &c; in which are diſſolved an ounce of honey of mercury, or of the *catholicum duplicatum*, or even ſix drams of the *hiera picra* of *Galen*, to cauſe a ſtimulus that may excite motions in the *uterus*.

3°. Purges ſlightly irritating, and on that account proper, by producing contractions in the inteſtines, to excite the ſame in the *uterus*. They may be compoſed of aloes, jalap, *diagrydium*, and *pulvis cornachinus*, each in a proper proportion; or even with *hiera picra*, in the doſe of three or four drams, in the form of a bolus.

4°. Emetics, which, by the briſk contractions they excite in the *diaphragm*, and in the muſcles of the *abdomen*, ſhake the *uterus* forcibly. The ſtibiated ſoluble tartar is commonly employed in the

doſe [1] of three or four grains, in broth, or in a diſh of tea; or the powder of *ipecacuana*, in the doſe of twenty-five, or thirty grains, in a bolus; or mixt, in the ſame manner, in a diſh of tea, or in broth.

5°. *Errhines*, or *ſternutatories*; which, by the ſneezings they excite, move the *uterus* with almoſt as much force as the emetics. There is employed for this purpoſe, the powder of the leaves of tobacco, betony, and ſage; and of the roots of Iris, or hellebore. But, if theſe powders be not ſufficiently powerful, a little of the powder of euphorbium, pellitory of Spain, or long pepper, may be added.

6°. Baths, and half baths, made with the decoction of emmenagogue herbs; fomentations upon the hypogaſtric region; and injections in the *uterus* with the ſame decoctions. For the manner of employing theſe remedies, what has been already ſaid on the ſubject of the firſt intention, Number 3, 4, and 8, may be conſulted. But it is proper to intimate, that they are very ſlightly efficacious, in bringing back the *menſes*; and ſcarcely ever uſed at all in the preſent practice.

7°. Fumigations, that are applied by means of the perforated chair, and the help of a kind of funnel; of which the deſcription has been already given. Theſe fumigations may be either moiſt or dry. Thoſe, which are moiſt, are made with the vapour that riſes from emmenagogue decoctions, moderately hot, put under a perforated chair. The dry are made from the powders, or troches, compounded of emmenagogue drugs; that are burnt under the chair. The dry fumigations were formerly much employed, even with ſubſtances very acrid, though they are attended with ſome danger. But at preſent ſcarcely any, unleſs moiſt fumigations, are uſed, and even with them care is required, that they be not either too acrid, or too hot. Theſe are ſuch as may be admitted with moſt ſafety.

[1] The quantity of ſtibiated tartar is varied, according to the ſtrength of the infuſion; ſo likewiſe is the direction for the uſe of this preparation, where it is ordered.

℞. *Aquæ*

℞. *Aquæ Communis, vel Decocti cujuſlibet emmenagogi bullientis q. ſ.*
Adde *ſpiritus ſalis Ammoniaci pauculas guttulas.*
Vapor excipiatur utero. Vel.

℞. *Scoriarum Reguli antimonii q. ſ.*
Coque in lixivio cinerum, donec lixivium rubicundum fiat.
Vapor excipiatur utero.

If theſe fumigations have no effect, the following may be employed in the caſe of women, who have the *uterus* naturally moiſt; and intirely free from pain.

℞. *Lixivii Scoriarum Reguli antimonii, de quo modò, part. iv.*
Vini Malvatici part. ij.
M. & affunde ſuper ſilices ardentes vel ferrum candens.
Vapor utero excipiatur. Vel.

℞. *Scorias Martis ignitas*, aut *ferrum candens, affunde urinam antiquam & fœtidam.*
Vapor utero excipiatur.

8°. *Peſſaries.* Theſe remedies were formerly very much uſed, to provoke the *menſes*; and even ſuch as were very acrid were ſometimes ventured to be employed. They are, however, much ſeldomer uſed at preſent; and when they are admitted to have any place in practice, it is only ſuch as are very mild: as a pledget of wool, or linnen, medicated with the juice of mercury; leaves of mercury bruiſed, and rolled up in a piece of fine linnen; or flour of nigella, and powder of myrrh, tempered with the juice of mercury, and mixt with boiled honey; of which a peſſary is formed. Moreover, it is only in women who have had commerce with men, that it is allowable to introduce theſe remedies into the *vagina*. For with virgins, it muſt ſuffice to apply them to the *vulva*; and the figure, which they there acquire, is the reaſon why the name of *naſcalia* is given to them.

9°. Finally, to these remedies may be added, exercise, in whatever manner it may be performed; on foot; on horseback; in a carriage; dancing frequently; or by the use of coition: but it must be observed, at the same time, that glysters, purges, emetics, sternutatories, fumigations, &c. never succeed well, but when they are administered with skill; and at the time, that every thing is almost ready in the *uterus*; as has been already remarked with respect to bleeding in the foot.

Precautions necessary in the treatment of the suppression of the menses.

I. To take care to prepare the patients, for the use of emmenagogue remedies, by evacuating the *primæ viæ*, by purges; and by correcting the depravity of the blood, by alteratives.

II. Not to attempt to bring on the *menses*, but in temperate seasons; as in the spring and autumn; when the humours are more fluid, and the vessels more flexible.

III. To suspend in summer the use of dissolvents, and aperitives; for fear of heating the patients too much: and to employ, at that time, only diluents, and humectants; as baths, and mineral waters, or, at most, gentle emmenagogues.

IV. Not to make use of any remedies in winter, or at least, not such as are of importance; for fear the cold of the season, that thickens the humours, and contracts the vessels, may prevent the effect of them.

V. To begin always with the most gentle emmenagogues, and dissolvents; and to go on to those, which are more strong and acrid, only in proportion as the inefficacy of the others renders it necessary.

VI. To reckon among the most safe and efficacious emmenagogues, the preparations of steel, and mercury, that have been proposed: and, also, in a particular manner, the gums; as gum Ammoniac, galbanum,

banum, &c: provided that thoſe remedies are preſcribed on the proper occaſions, and in moderate doſes.

VII. To uſe alternately, with the emmenagogues and diſſolvents, humectants and diluents, to endeavour to relax, and ſupple the veſſels of the *uterus*, at the ſame time that it is attempted to augment the effect, the blood ought to make to open them.

VIII. To often even join together emmenagogues, and diſſolvents, with humectants, and diluents; and ſometimes even with narcotics; but in a doſe ſo ſmall, that it may not cauſe any doſing.

IX. To moderate the action of the emmenagogues, or even to diſcontinue the uſe of them, if the *uterus* become painful, or the patient perceives herſelf to be very much heated: which may be diſcovered by *inſomnia*; thirſt; the quality of the urine; &c.

X. To obſerve this conduct particularly in the caſe of patients who are of a bilious temperament; that is to ſay, who have their blood acrid and dry; and the fibres of the veſſels ſtiff, diſtended, eaſy to be put into the ſtate of an *erethiſmus*; in which the emmenagogues cauſe almoſt always much heat, and ſometimes even fever.

XI. To exerciſe the ſame caution, in the caſe of patients, whoſe lungs are weak and tender; that is to ſay, who have their breaſt ſtrait and contracted; and their reſpiration ſhort and difficult; or who are ſubject to a cough; and are of a family where the diſeaſes of the breaſt have been common.

XII. Not to remain ſatisfied, in this laſt caſe, with intermixing humectants, and pectorals, with emmenagogues: but to order even aſſes or goats milk: though the uſe of milk is not of itſelf very ſerviceable, in the ſuppreſſion of the *menſes*.

XIII. To apprehend, that an oppoſite conduct would draw on ſome inflammation, or ulcer in the *uterus*, or the lungs; or open ſome veſſel in theſe parts, that would be followed by a bad hæmorrhage.

XIV. Not to uſe at all, or with the greateſt precaution, certain emmenagogues, that are too acrid, or diſſolvent,

diſſolvent, with whatever praiſes they may appear to be honoured in the works of ſome authors.

XV. To avoid, above all things, peſſaries, injections, and fumigations, that are too acrid: which, acting immediately on the *uterus*, may have effects proportionably dangerous. Such is the fumigation made with the regulus of antimony powdered, and thrown by pinches on burning coals. Such, alſo, is that prepared by mixing lime with urine; from whence there riſes a true volatile ſalt of *ſal Ammoniacus*.

XVI. To have the prudence, to chuſe rather not to bring on the *menſes*, than to run the hazard of procuring their return by ſuch means, as expoſe the patients to all the fatal accidents, that may happen from them.

XVII. To take, in waiting the return of the *menſes*, proper meaſures to diminiſh, and reſtrain the accidents, which the ſuppreſſion brings on, by bleeding practiſed with circumſpection: or, what is always more ſafe, by repeated purges, and due regimen.

XVIII. To ceaſe to employ emmenagogues, if it happens, that the *menſes*, inſtead of reſuming their natural courſe, open themſelves, elſewhere, ſome new paſſage; eſpecially if this eruption be made by any noble part; ſuch as the lungs.

XIX. To have recourſe, in this caſe, to remedies, that are moſt proper to ſtop ſo dangerous an hæmorrhage: upon which Chapter VII. *of the deviating menſes*, may be conſulted below.

XX. Laſtly, to confine, in caſes where the endeavours to bring back the *menſes* fail of ſucceſs, the further treatment of them to the palliative cure: which conſiſts in purging, and bleeding the patients from time to time; and preſcribing them a proper manner of eating; as well with relation to the quantity as the quality of the food: in ſweetning the blood by broths, or apozems, or by mineral waters, according to the ſeaſons, &c. that nature may ſupply in ſome other way, as by urine, ſtool, ſweats, or inſenſible perſpiration, the

the want of the evacuation of the *menſes*, that cannot be reſtored.

Medicines recommended in the ſuppreſſion of the menſes, *which may be uſed without danger.*

There are found in the works of practitioners, and even in the moſt celebrated, ſeveral medicines, which they offer as approved remedies in the ſuppreſſion of the *menſes*. Unhappily their number ſeems to evince their inefficacy. There would have been no occaſion to have boaſted of ſo many, if there had been any one among them that was indubitably certain. I believed it to be incumbent on me, nevertheleſs, to enumerate them. They are, for the moſt part, agreeable to the intentions propoſed for the cure of this diſeaſe; and ſeveral of them are among thoſe, which have been already mentioned. But, in enumerating them, I thought it requiſite, to diſtinguiſh thoſe, that may be employed without fear, from thoſe whoſe violence is to be ſuſpected; and whoſe effects may be dangerous: and it is with this view, I have made two ſeparate articles.

I. Roman camomile, *Chamæmelum Romanum*. Half a handful of the flowers of camomile is boiled in wine; and the decoction is given faſting for three days. This medicine is innocent: but, at the ſame time, whatever commendations it may have had, it ſhould only be reckoned among the weakeſt emmenagogues.

II. Madder, *Rubia Tinctorum*. A powder very much recommended in ſuppreſſions of the *menſes*, is made, by mixing an ounce of the roots of madder, powdered very finely, with an ounce of ſugar powdered. This mixture is divided into five, or ſix doſes: and they are given in warm wine, morning and evening, five or ſix days together, before the time of the return of the *menſes*. The medicine is as innocent, and almoſt as weak, as the preceding.

III. Mugwort,

III. Mugwort, *Artemisia vulgaris*. This plant is in common use in suppressions of the *menses*. Boasts are particularly made of a kind of conserve prepared of the tender leaves of mugwort pounded, reduced into pulp, and mixt with double its weight of sugar. A dram of this may be given in the morning fasting, for several days, at the approach of the time when the *menses* ought to appear. [1] Zacutus, to render it more efficacious, ordered the patients to drink after it two ounces of savin water, in which had been suffered to infuse cold, during one night, half a dram of rhubarb. But the savin water ought to render this medicine suspected: because it renders it dangerous: as will be shewn in the following article.

IV. Lavender, *Lavendula*. In the places where this plant is common, the country-women have a custom of eating, in the morning fasting, some pinches of the flowers, chopt very small, and mixt with honey. They drink upon it, either a potage made of vetches, which has been before mentioned; or a decoction of white horehound: and they continue to take this medicine, for several days together.

V. Marigold, *Caltha sive Calendula*. A kind of conserve is made with the flowers of marigold, and sugar, pounded together; of which two drams is given, in the morning fasting, for several days; taking after it either some broth, or some emmenagogue decoction.

VI. Rosemary, *Ros marinus*. A handful of the leaves of rosemary is boiled with three or four pinches of the flowers of wall-flower; *Florum Cheiri vel Leucoii lutei*; and the decoction is given in the morning fasting, at the approach of the time when the *menses* are expected.

VII. Birthwort, *Aristolochia*. There are two kinds of *aristolochia* employed in medicine: the long, and the round. Besides the use which is made of it in broths, and decoctions, to bring back the *menses*,

[1] *Prax. admirand.* Lib. ii. Observ. 99.

there

there is prepared of it, in the ſame view, pills, known under the name [1] *Pilulæ de Ariſtolochiâ Fernelii:* which maintain a reputation, even now.

℞. *Radicum Ariſtolochiæ rotundæ,* ℥j.
Radicis Gentianæ, Myrrhæ electæ, āā ʒiij.
Aloës & Cinnamomi, āā ℥ß.
Zinziberis ʒj.
Omnia exquiſitiſſimè tritæ excipiantur oleo Amygdalarum dulcium recenti. F. Maſſa Pilularum.

Theſe pills may be ordered ſeveral days together, in the doſe of a dram, or a dram and half; taking immediately after them, broth made with the ſweetning plants; or ſuch as are ſlightly emmenagogue.

There may be compoſed, with the ſame roots of the round birthwort, other pills, that are not leſs recommended in the ſuppreſſion of the *menſes:* and which are as gentle as thoſe which bear the name of *Fernelius.*

℞. *Radic. Ariſtolochiæ rotundæ & Rubiæ Tinctorum,* āā ℥ß.
Agarici & Cinnamomi, āā ʒj.
Croci oriental. pulverat. ℈j.
Cum ſucco Artemiſiæ. F. Maſſa Pilularum, cujus doſis à ʒj. ad ʒij.

The ſame roots may be ordered in a manner yet more ſimple.

℞. *Radicum Ariſtolochiæ rotundæ & Rubiæ Tinctorum,* āā ℈j *vel* ʒß.
Agarici trochiſcati gr. xv. M. cum ſyrupo de Artemiſiâ. F. Bolus pro unâ doſi.

VIII. The blood of a wild goat, *Sanguis Hirci ſylveſtris.* Beſides ſeveral other properties, there is aſcribed to the blood of the wild goat, that of provoking the *menſes.* It may be taken ſeveral days together, either in powder, or in a bolus; or diluted with ſome

[1] Fernelius, *Method. Medendi,* Lib. vii.

proper

proper decoction; in the dose of from a scruple to half a dram. The blood of a tame goat may be used for the same purpose: but as it is less powerful, the dose should be a dram.

IX. Old leven, or yeast, *Fermentum panificum vetus.* A quantity of old leven, or yeast, of the size of a chesnut, kneaded with an equal quantity of sugar in powder, is given in the morning fasting, several days together, before the time of the return of the *menses.* Others dilute it with some emmenagogue apozem, or proper water. This remedy is extremely cried up: but I suspect this prejudice has no other foundation, than the mistaken authority of Galen, who has attributed to yeast the faculty of discussing and resolving: which is true of it, applied externally in a cataplasm; but proves nothing for it, taken internally. But, after all, if the yeast be not efficacious in the suppressions of the *menses*; at least it may be tried without any danger.

X. Aloes, *Aloë.* The sugar of aloes washed with rose water makes the basis of pills, called *Pilulæ de Aloë lotâ:* which are purgative and dissolvent. There are some physicians, who recommend them to provoke the *menses* in the dose of one dram; and who even dare to add, in order to acuate them, a scruple of the powder of savin: a practice, I presume, however, not at all fit to be imitated.

The juice of aloes make the basis, likewise, of the *Hiera picra*, a kind of purgative electary; of which the description is found in every Pharmacopeia: and it is on account of the aloe that [2] Galen is lavish, in more than one place, in praises of the use of this medicine, as very efficacious in suppressions of the *menses.* It may be given in the dose of one or two drams, either alone, or mixt with half a scruple of castor: of which boluses are to be formed; and gilt, that the bitterness may not be tasted. It should not

[1] *De Simplic. Medicament. Facult.* Lib. viii. cap. 16. Num. 4.

[2] *De compos. Medicam.* Lib. viii. cap. 3. Et *De Curand. ratione per venæ sect.* Cap. 18.

be neglected to give after them, a broth made of flesh; or some emmenagogue decoction; to dissolve them in the stomach.

The juice of aloes enters also into the composition of the pestilential pills of Rufus, as well as myrrh, and the Oriental saffron. Therefore, it must not be thought surprising, that these pills should be recommended in suppressions of the *menses*. They are ordered to be taken in the morning fasting, for several days together, in the dose of half a dram, or of two scruples, each time.

Moreover, as the *elixir proprietatis* is nothing else but the tincture of Rufus's pills drawn with spirit of wine; and the white elixir of *garus*, only the *elixir proprietatis*, distilled in *balneo mariæ*; these two elixirs may be used with success in suppressions of the *menses*, for several days. The first in the dose of fifteen or twenty drops: the second in the dose of a tea-spoonful, in some proper fluid.

XI. Leeks, *Porrum*. Hippocrates, or at least the author of the book *De naturâ muliebris*, advises the juice of leeks, mixt with that of cabbage, as an efficacious medicine in suppressions of the *menses*. But I question, whether the success answers to the expectations this author raises.

XII. Oriental saffron, *Crocus Sativus*. The flower of saffron is emmenagogue, stomachic, and anodyne. It may be used in several manners, in the suppressions of the *menses*. It enters into the pestilential pills of Rufus, the *elixir proprietatis* of Paracelsus, and the elixir of *garus*, which has been already mentioned. It is added in substance to the greatest part of the preparations that are most recommended in this disease. It may be slightly infused in emmenagogue apozems, or in tea. Moreover, it is given in powder in the yolk of a raw egg, for several days together, in the dose of twelve, fifteen, or twenty grains.

XIII. Mercury, *Mercurialis*. It has been shewn above, that mercury is classed among the emmenagogue plants: and that a kind of pessary for provoking

the

the *menſes*, is made of the pounded leaves of it. Arnaud de Villneuve [1] held this plant in great eſteem: and put the juice of it into the compoſition of the following pills: which he recommended in ſuppreſſions of the *menſes*.

℞. *Succi Mercurialis & Mellis deſpumati*, āā ʒj.
Farinæ Nigellæ quart. ß. *vel q. ſ. ut poſſint confici pilulæ.* Doſis à ʒj. ad ʒij. per aliquot dies, cum inſtat Catameniorum periodus.

XIV. Myrrh, *Myrrha*. This reſin is ranked in the number of the moſt ſafe, and the moſt excellent emmenagogues. Therefore it is commonly uſed in the greateſt part of the opiates or boluſſes that are ordered for reſtoring the *menſes*.

Many preparations, of which myrrh makes the baſis, are recommended for the ſame purpoſe: as the troches of myrrh; which are ordered in the doſe of half a dram, or a dram; giving after them broth ſimply, or prepared with emmenagogue plants: and the celebrated pills of Montagnana; which are in repute at preſent.

℞. *Trochiſcor. de Myrrhâ*, ʒjß.
Semin. Apii, Caſtorei & Corticis Caſſiæ, āā ℈j.
Moſchi gr. x. *Cùm ſucco Apii formentur pilulæ, N°.* xij. Capiat duas manè per aliquot dies.

Theſe pills have been augmented or corrected in ſeveral manners, on which the Diſpenſatories may be conſulted. But they retain always the name of Montagnana; and preſerve nearly the ſame qualities.

XV. Iron or ſteel, *Ferrum ſive Chalybs*. Beſides the ſeveral preparations of iron and ſteel, that are commonly uſed in ſuppreſſions of the *menſes*; two very ſimple remedies, but, at the ſame time, very efficacious, that have iron for their baſis, ſhould not be neglected. The one is compoſed of equal parts of the ruſt of iron, or porphyriſed filings of ſteel, and

[1] *Lib. de Mulier. ſterilitate.* Cap. 8.

of

of powdered leaves of calamint; which are incorporated by syrup of mugwort. The dose is one grain; to be taken in the morning fasting, for some days. The other is a powder composed of one part of the aperitive saffron of Mars, prepared with sulphur; two parts of cinnamon, and three parts of sugar. These three drugs are well mixt together, after having reduced them to a fine powder. The dose is, from half a dram to a dram, in the morning fasting, for several days together. Troches may be, also, made of them; and given in the same dose.

XVI. Red or black vetches, *Cicer rubrum vel nigrum.* The potage of vetches is boasted as a very good medicine in suppressions of the *menses.* It is made by boiling the vetches in common water, a long time, with roots of parsley: adding, at the end, a little cinnamon, and Oriental saffron; and in straining it, a little butter is melted in it. This kind of potage is given in the morning, fasting, for several days, at the approach of the time when the *menses* ought to appear.

XVII. White horehound, *Marrubium album sive Prassium.* A good handful of the tops of white horehound is infused, or even slightly boiled, in a gallon of white wine. The decoction is strained off with pressure; and given hot in the evening, at the time of going to bed. This medicine is good: but I doubt whether it merits all the praises, the [1] physician who proposed it has bestowed on it.

XVIII. The spleen of an ox, *Splen bovis castrati.* Two medicines are prepared from the spleen of an ox; both extremely cried up in suppressions of the *menses.*

The first is the decoction of an ox's spleen. The intire and sound spleen of an ox, cut in pieces, is put into a glass cucurbit, large enough to be only half filled with it. There is then added, an ounce of cinnamon grossly powdered; half an ounce of cloves,

[1] Borellus. *Centur.* iv. Observ. 14.

two drams of saffron, and as much white wine as may be necessary to moisten the other ingredients. The cucurbit is afterwards stopt, by reversing another into it; and then luting them together: and the whole is boiled for twenty-four hours, in *balneo mariæ*, with a strong heat, till the pieces of the spleen are almost dissolved. The vessel is then suffered to cool; afterwards unluted; and the decoction strained off without pressure. Of this four ounces is given to the patient every day in the morning fasting, for four or five days, before the time of the *menses*.

The other medicine [1] is a tincture, made in the following manner.

Take an ox's spleen; and having cut it into very thin slices, let it macerate, for some days, in tincture of myrrh, drawn with spirit of wine. Dry the slices then in the shade; and draw from them a tincture, with spirit of wine, in the usual manner.

There may be added, to this tincture, some drops of oil of Angelica, to render it more efficacious, as well as more agreeable. The dose is ℈j. *in any proper water, for some days together, before the time of the return of the* menses.

These two medicines come originally from Paracelsus [2]: who is, as far as I know, the first who has spoken of the virtue of an ox's spleen, for provoking the *menses*. Such an origin will scarcely procure any credit to it. I could never perceive much efficacy in these medicines; and the little, which they have, I am convinced, they owe to the emmenagogue drugs, that are added in preparing them.

XIX. Castor, *Castoreum*. It is an unctuous fluid, of a strong smell, that collects in the *folliculæ* proper to castors. It is made use of, with success, in the hysterical vapours: and it is proper, also, in suppressions of the *menses*; employed either in substance, in

[1] See Oswaldus Crollius *in Basilicâ Chimicâ, pag.* 305.

[2] *Archidoxorum*, Lib. vii. *in fine.*

the dose of, from ten grains to a scruple: or in tincture, in the dose of, from fifteen to thirty drops.

Remedies recommended in the suppressions of the menses; *but of which the effects are suspected.*

The following remedies are authorized by suffrages, too numerous, and too respectable, to admit of their being rejected, as pernicious. I cannot doubt, but that they have formerly had success, since celebrated practitioners assure us of it; and I believe they would have now the same success, sometimes, if they were employed on proper occasions, by physicians who knew, distinguished, and embraced the proper opportunities of giving them: and who had the prudence never to administer them, but with the necessary circumspection. Unhappily, the ablest physicians do not use them at all; or but very seldom. There are scarcely any but zanies and empirics who employ them: and, in their hands, it is not surprising, that they produce bad effects: for it is evident, that, with them, their boldness is always equal to their ignorance.

I. Savin, *Sabina vulgaris.* Many authors, some of them celebrated, recommend, in suppressions of the *menses*, different preparations of this plant; as,

1°. The decoction of the leaves in common water, either alone, or joined to other emmenagogue plants, in the quantity of half a handful for each dose.

2°. The water distilled from this plant, which is used in the same manner as the other emmenagogue waters: and is given, at each time, in the dose of one ounce.

3°. The distilled oil of savin; which is intermixt in opiates, boluses, and pills, for the suppression of the *menses*, in the quantity of two, three, or four drops each dose.

4°. The extract of savin, which enters into the same medicines, in the quantity of, from half a scruple to a scruple for each dose.

5°. The syrup of savin: which is also described by a [1] German physician, who calls it an admirable secret, *Secretum singulare:* and says, that he had tried it with success in several suppressions of the *menses*, which were accounted desperate.

℞. *Pulegii, m.* ij ß.
Artemisiæ, m. j ß.
Betonic. & Calamint. āā *m.* j ß.
Sabin. m. iij.
Satureiæ, Meliss. Menth. Abrotan. āā *m.* j ß.
Centaur. Minor. m. j.
Semin. Anisi, Fœnicul. āā ʒiij.
Radic. Petroselini, Asparagi, Asari, āā ʒvij.
Polypod. ℥j ß.
Helenii, ℥j ß.
Zedoariæ, ʒj ß.
Dictamn. ʒj.
Macis, & Nucis Moschat. āā ℈j.
Caryophillor. ʒj ß.
Aquar. Betonicæ, Pulegii, Artemisiæ, āā ℔ij.
Satureiæ, ℔j ß. Coq. s. *in collaturâ infund. Rhabarb. elect.* ʒvj. Stent per noctem, manè s. fortis expressio & cum sacchar. s. q. coque ad Syrupi consistentiam. Dosis ab ℥ ß. ad ℥j.

Every one of these medicines are, in all cases, to be suspected; and in many dangerous: because the acrid and phlogistic quality of the savin frequently occasions floodings; obstinate vomitings; convulsions, or convulsive motions; &c. The syrup, such as has been described, is least dangerous: because the savin enters there, only in a small proportion: but it is a medicine too much compounded.

II. Wild cucumber, *Cucumis sylvestris, sive asininus.* This plant is a violent purge: and a very acrid dissolvent. Some authors think proper to employ it, in several different manners, for suppressions of the *menses.* In which case they order,

[1] Hieronymus Reusnerus. *Observ.* 194. *In Sylloge Observat. & Curation. Medicinal. à Welschio editâ.*

1°. The

1°. The decoction, which is made with two or three drams of the root for each dose.

2°. The juice expreſt from the pounded leaves, which they ſuffer to depurate; and give in the doſe of a dram, or a dram and half.

3°. The ſame juice inſpiſſated to the thickneſs of an extract; and then known by the name of *elaterium*: of which the doſe is from two to three grains.

Theſe medicines are made ingredients in emmenagogue decoctions, ſyrups, boluſſes, &c: but, as they are never employed without ſome danger; they ought not to be employed at all, unleſs with great caution: and, perhaps, after all, it would be more prudent never to employ them.

III. White briony, *Bryonia, ſive vitis alba.* The decoction of the root of this plant is propoſed in ſuppreſſions of the *menſes*, in the quantity of two drams, for a doſe: or the *fæcula*, that is to ſay, the ſediment depoſited by the expreſt juice of the root, in the doſe of ten or twelve grains.

Theſe two medicines are little leſs irritating, or phlogiſtic, than the ſavin, and the wild cucumber. The moſt ſafe method, therefore, is not to employ them; or, at moſt, but in very ſmall doſes; and with very great caution.

IV. Dragonwort, *Dracontium majus ſive Dracunculus*; and the cuckow-pint, *Dracontium minus ſive Arum.* Theſe two plants are acrid, cauſtic, and phlogiſtic; and conſequently dangerous for internal uſe. On this account I would adviſe againſt liſtening to the authors who have recommended the ſeeds, or berries, of theſe plants, or the juice of the berries inſpiſſated, and formed into paſtils; in ſuppreſſions of the *menſes*.

V. Black hellebore, *Helleborus niger.* The root of this plant may be uſed in ſuppreſſions of the *menſes*, provided it be with diſcretion. It is propoſed to take half a dram; and cut it into very ſhort pieces. Theſe pieces are put into an apple, which is afterwards baked at a fire. When the apple is well baked, all

the pieces of the hellebore root are taken out; and the apple is given to the patient to be eaten fasting: which is repeated every second day; and continued for some time. This medicine is much less dangerous than the preceding. It ought not, nevertheless, to be ever employed at all, and much less continued, but with the greatest discretion.

VI. Spanish flies, *Cantharides*. Hippocrates, or, at least, the author of the book, *De naturâ muliebri*, which is among the works that go under his name, advises to give, internally, in the suppressions of the *menses*, four, or even five, cantharides; after having cut off the head, feet, and wings. But this authority ought not to influence any body to persue a practice so dangerous.

Instead of cantharides, the powder of earth-worms, *Lumbricorum terrestrium*, may be used with good success; and without hazard, in the dose of from half a dram to two scruples.

The powder of glow-worms, *Cicindelarum*; are likewise recommended in the same cases. But as these are more acrid than the earth-worms, it is proper to be more cautious in the use of this powder. and only to order it in smaller doses.

VII. Menstrual blood, *Sanguis ex menstruatâ muliere*. It is practised, in some provinces of Germany, to wash, in common water, a piece of the cloths used by women, who have the *menses*; and to give this water to those who have them not. There are even some physicians[1], who believe this practice serviceable; and who pretend to have experienced the success of it. For my own part, I confess, I doubt both the accounts they give, and more yet the too general consequences they draw from particular facts. But, although this practice appears to me as inefficacious, as it is disagreeable, I cannot esteem it as dangerous in any case;

[1] Daniel Ludovicus. *In Ephemerid. Natur. Curios. Germ.* Decur. i. Ann. 9 & 10. *Observ.* 35. Andreas Myrrhen. *Ibid.* Decur. iii. Ann. 9 & 10. *Observ.* 215.

at

at leaſt unleſs the woman, who furniſhed the cloth, be unſound, have her blood infected, or be afflicted with ſome ulcer in the *uterus*.

CHAP. V.

Of the menſes *retained by ſome fault of conformation.*

§. I. DESCRIPTION.

IN ſome caſes the times of the returns of the *menſes* are marked periodically, as if they were going to appear: the conſequences make it even ſhow clearly, that the blood muſt then be regularly diſcharged into the cavity of the *uterus:* and yet there is not, nevertheleſs, any appearance of it externally; becauſe the paſſage is not free. It is this, which is to be underſtood, when it is ſaid, the *menſes* are retained in the *uterus* by a fault of conformation.

Obſervations prove, that the faultineſs of conformation may ariſe from three different cauſes: 1°. From a membrane, or ſkin, placed croſſwiſe in the *vagina*; which cloſes up its paſſage. 2°. From an excreſcence formed in the cavity of the *vagina*; which fills, and ſtops it up. 3°. From a *cicatrix*, which connects together the *parietes*, or interior coat of the *vagina*; or the lips of the *vulva:* and which deſtroys the cavity.

I. The membrane has not, according to obſervation, always the ſame place. It is certain, that it is almoſt always at the entrance, or orifice of the *vagina:* but ſome pretend to have found it further inwards: and even at the orifice of the *uterus*. It is generally thin, and purely membranous: and there are but very few caſes, where it is found denſe, compact, and almoſt callous.

II. The place of the excreſcences is yet more variable than that of the membranes. Commonly, they are even with the entrance of the *vagina:* but they may be further inwards; and ſometimes adhere to the very orifice of the *uterus.* As they are found of a different nature; fleſhy, fat, glandulous, and ſteatomatous; ſo they are alſo found of different magnitudes; large, middling, and ſmall.

III. The *cicatrix*, which connects the *parietes*, or coats of the *vagina*, may happen in all the parts of this canal: at its orifice, in its length; at its internal extremity; and even at the orifice of the *uterus.* It is ſometimes lax, and ſuperficial; ſometimes firm, and cloſe; ſometimes the ſurfaces oppoſed to each other, are only united in a very ſmall compaſs; and ſometimes in a larger. The lips of the *vulva* have been often obſerved, connected together in the ſame manner, by a preternatural *cicatrix*, ſo cloſely, that there was left only a very ſmall opening for the paſſage of the urine.

All theſe ſeveral facts are eſtabliſhed by inconteſtable obſervations; but it will be ſufficient to point out the ſources in the following articles, without enumerating the particulars of them. At preſent it is only proper to remark, that, in all theſe caſes, there is no diſorder, when the patients are not as yet of an age to have the *menſes.* That when they attain this age; or when the diſorder happens to girls that already have the *menſes*; the retention of them is not very bad in the beginning, while there is but little blood collected in the *uterus*; but that gradually the accidents increaſe in proportion, as the blood is accumulated there. That, in the end, the belly ſwells, grows hard, and becomes painful: the *vagina*, and the edges of the *vulva*, tumefy: the inferior extremities become *œdematous:* the patients feel a heavineſs; and have, every night, their face puffed up: and that nauſea, a bad ſtomach, and a fever; at firſt erratic, and afterwards ſlow; are added to the other inconveniencies: and unleſs the diſorder be effectually

fectually cured, it terminates in a confirmed dropsy, gangrene, or consumption.

§. II. CAUSES.

I. The membrane, which crosses, and stops up the *vagina*, at least that which is found at the entrance of this passage, is the *hymen* itself; or, in other words, that kind of membrane, which is found naturally in all girls, at the orifice of the *vagina*; and which is an essential circumstance of their virginity. All the difference there may be, is, that, in the cases we have been speaking of, this membrane is intirely closed; whereas, in its natural state, an opening is left in the middle of it.

I am not ignorant, that[1] some have strenuously denied the existence of this membrane. I am sensible, moreover, that those have been laught at, who have admitted it; that attempts have been made to represent them, as credulous and visionary anatomists; and that it has been pretended, this membrane, or *hymen*, was never found in girls of any age whatever; or, in so few instances, that it ought to be considered as a fault of conformation, and preternatural.

But I know, at the same time, these assertions, po-

[1] Ludovicus Vassæus. *Tabul. anatomic.*

Realdus Columbus. *De re anatomic.* Lib. xi. cap. 16.

Johan. Fernelius. *Physiolog.* Lib. i. cap. 7.

Ambroise Paré. *Oeuvres de Chirurgie.* Liv. iii. chap. 34. & Liv. xxiv. chap. 49.

Franciscus Vallesius. *Lib. de sacrâ philosophiâ*, cap. 25.

Horatius Augenius. Tom. ii. *Epistol. & Consultat. Medicinal.* Lib. i.

Severinus Pinæus. *De notis virginitatis*, Lib. i. cap. 9.

Andreas Laurentius. *Histor. anatom. corpor. human.* Lib. vii. cap. 12. & quæst. 13.

Marc. Anton. Ulmus. *De utero.* Sect. i. chap. 7.

Hercules Saxonia. *Praxeos Medicæ.* Lib. iv. cap. 4.

Franciscus Ranchinus. *De morb. Virgin.* Sect. i. cap. 4.

Nathanael Highmorus. *Corpor. humani disquisit. anatom.* Lib. i. Part. iv. cap. 4.

Regnerus de Graaf. *De Mulier. organis.* §. De Hymene.

Pierre Dionis. *Operat. de Chirurgie.* Demonst. 3.

Jean Palfin. *Descript. des parties des Femmes, qui servent à la génération.*

sitive

sitive as they are, could never make impressions; if the least deference be paid to the judgment, and authority of those who have maintained the reality and universality of this membrane. For there may be reckoned in that number, [1] Berenger de Carpi, [2] Vesalius, [3] Fallopius, [4] Coiter, [5] Varolius, [6] Riolanus, [7] Vessingius, [8] Bartholin, and [9] several others, whose names will be found in the bottom of the page: or, in other words, all the more learned, and able anatomists of the sixteenth, and seventeenth centuries. At least, these peremptory assertions cannot have any influence at this time, when it is known, that [10] Laurence Heister, [11] Frederic Ruysch, [12] John Baptist Morgagni, and [13] James Benignus Winslow, all describe this membrane in the same manner; and all affirm, they have found it in every young girl, they have had

[1] Jacobus Berengarius Carpus, *in Isagoge anatomicâ.*

[2] Andreas Vesalius, *de corp. hum. fabricâ.* Lib. v. cap. 15. & in Epistolâ ad Joachimum Roelants, *de radicis Chinæ usu.*

[3] Gabriel Falloppius, *in Observat. Anatomic.*

[4] Volcherus Coiterus, *in Tabul. anatomic.*

[5] Constantius Varolius, *Anatom.* Lib. iv. cap. 4.

[6] Johannes Riolanus, *Anthropogr.* Lib. i. cap. 16.

[7] Johannes Vesslingius, *Syntagmat. anatomic.* Cap. 7.

[8] Thomas Bartholinus, *Anatom.* Lib. i. cap. 31.

[9] Johannes Wierus, *Observat.* Lib. i. Et *de Lamiis.* Lib. iii. cap. 20.

Archangelus Piccolhominus, *Prælection. anatomic.* Lib. iii.

Scip. Mercurius, *delle Comare.* Lib. i. cap. 2.

Franciscus Plazzonus, *de partib. generat.* Lib. ii. cap. 5.

Adrianus Spigelius, *de hum. corp. fabricâ.* Lib. viii. cap. 18.

Melch. Sebizius, *Exercitat. Medic.* XLVII.

Dominicus Panarolus, *Pentecost.* V. Observ. ultim.

Isbrandus de Diemerbroeck, *Anatom.* Lib. i. cap. 16.

Johannes Swammerdamius, *de uteri muliebr. fabricâ* in tabulis.

Gerardus Blasius, *in Observat. anatomic.*

Johannes Casparus Westphalus, *Ephem. Cur. Germ.* Dec. ii. Ann. 8. *Observ.* 215.

Hermannus Fredericus Teichmeyerus, *Institut. Medicin. legalis, & forensis.* Cap. 4.

[10] Laurentius Heisterus, *in compend. anatom.* Et *Ephem. Nat. Curios.* Cent. viii. Observ. 69.

[11] Fridericus Ruyschius, *Thes. anatomic.* iii. N° 15. vi. N° 1. vii. N° 60

[12] Joh. Baptista Morgagni, *Adversaria Anatomic.* i. 29. iv. 23.

[13] Jacques-Benigne Winslow, *Exposit. Anatomique.* N° 653.

occasion

occaſion to examine. My teſtimony is ſcarcely requiſite, after that of ſo many anatomiſts of the firſt rank: but I believe it may be, nevertheleſs, proper I ſhould certify, that I have found it in the ſame manner, in all the young ſubjects, I have had an opportunity of diſſecting.

The inference muſt, therefore, be, that thoſe who deny ever to have ſeen it, muſt either have examined only ſuch girls as have loſt their virginity; or that, prepoſſeſſed with the falſe notion, the *hymen* muſt always cloſe the entrance of the *vagina* intirely, they have miſtaken it at the time it was before their eyes; and have even ſometimes given the deſcription of it, without mentioning the name. This appears moſt probable, and may, as it ſeems, be even concluded from their own accounts.

To prevent, therefore, this inconvenience for the future; and to fix the notions, on this matter, in ſuch a manner as to remove all doubt, I think it proper to deſcribe the *hymen* in its natural ſtate, according to the anatomiſts before quoted; and as it is really found in the ſubjects.

The *hymen* is formed by the internal membrane of the *vagina*, which turns back at the orifice of this paſſage; and forms, by its folding, a kind of annular binding, fixt to the whole circumference; pretty broad towards the lower part, near the *anus*; narrower on the ſides; and very narrow in the upper part, behind the *urethra*. As this kind of annular binding is formed of the ſame membrane as lines the inſide of the *vagina*, ſo the ſame irregularities are obſerved on both theſe ſurfaces, as on the reſt of the *vagina*. This membrane is of ſome thickneſs at its edge, where it is fixt to the orifice of the *vagina*: becauſe there is, in that part of it, a *ſtratum* of the cellular ſubſtance of the *vagina*, betwixt its two *lamina*. But this *ſtratum* is loſt in the further extenſion of the membrane: and its two *lamina*, which are then brought nearer together, incloſe only ſome ſmall blood-veſſels.

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In its * natural ſtate, it is perforated towards the middle, with an opening, commonly circular; but ſometimes oval, oblong, or irregular: the magnitude of which varies in different ſubjects; and yet more, in different ages of the ſame ſubject. Morgagni affirms to have found, in a girl, this opening ſeparated into two, by a membranous fillet; which extended directly from the top to the bottom. He adds, that Veſalus has obſerved the ſame thing twice: which makes him preſume, this conformation was not very rare; and that it had given room for ſome authors to call the *hymen* as they do, the pillar of virginity, *columnam virginitatis.*

To return, however, to our ſubject, it may be concluded, from this deſcription, 1°. That it may ſometimes happen, the opening, which remains in the middle of the *hymen* [1], may be only one, as it ought to be, but extremely ſmall. 2°. That, at other times, a membranous fillet, or column, may part this opening into two [2]; and form, inſtead of one of middling magnitude, two very ſmall lateral openings. 3°. That ſometimes this firſt fillet, which is perpendicular, may be cut, or croſt, by one, or ſeveral, ſimilar fillets, placed horrizontally: which muſt divide the common opening of the *hymen* [3] into ſeveral ſmall holes, in the form of a ſieve. 4°. That, moreover, in ſome caſes, the *hymen* may be [4] intirely cloſed; and without any opening:

* The jagged remains of this membrane, torn in the loſs of virginity, form the *caruncullæ myrtiformes.*

[1] Ambroiſe Paré. *Oeuvres de Chirurgie.* Liv. xxiv. chap. 49.
Petrus Foreſtus. *Obſervat.* Lib. xxviii. Obſervat. 55.
Johannes Schenckius. *Obſerv. Medicinal.* Lib. iv. Obſerv. 97. ex Adverſariis Dryandri.
Daniel Sennertus. *De Morb. Mulierum,* Part. i. Sect. i. cap. 3.
Gerardus Blaſius, *in Obſerv. Medicis rarioribus.*

[2] Johannes Schmidius. *Miſcell. Cur. German.* Decur. i. annæ 3. Obſerv. 24. Et Annis 4 & 5. Obſerv. 157.

[3] Guillelmus Fabricius Hildanus. Cent. iii. Obſerv. 60.

[4] Antonius Benivenius. *De abditis morb. & ſanat. cauſis.* Cap. 28.
Caſparus Wolphius, *in Obſervat.* apud Schenckium.
Johannes Wierus. *De præſtigiis dæmonum.* Lib. ii. cap. 38.

Rembertus

ing: and that it consequently will then stop up intirely, the passage into the *vagina*.

In the three first cases, of which we have quoted several instances, the communication of the *vagina* with the *vulva* subsists; but is very narrow, and much obstructed. In the last case, of which instances are yet more common, this communication is wholly intercepted. The girls, in whom these faults of conformation are found, were called by the Greeks ἄτρητοι. The physicians who have written in Latin among us, have given them the name of *imperforatæ*, *clausæ*, or *velatæ*; and the Italians that of *coperchiate*. The Romans had no appropriated word to signify this state; and they expreſt it by some circumlocution. It is thus, that [1] Cicero, speaks of a dream, where a woman was seen, *quæ obsignatam habebat naturam*: and that [2] Pliny relates, Cornelius the mother of Gracchi, *concreta genitali nata fuerat*.

It is true, that what has been said does only account for the origin of the membranes, that are at the orifice of the *vagina*: since it is there, the natural situation of the *hymen* is fixt. But it is there also, these membranes are almost always placed: at least all those were so, of which the accounts have been above cited. But if any have been found further in the *vagina*, and beyound the *hymen*, as [3] Ruysch, and a German

Rembertus Dodonæus. *Medicinal. Observat.* Cap. 34.

Bartholomæus Cabrolius. *Observat. Medicar.* 23.

Caſparus Bauhinus. *Theatr. anatom.* Lib. i. cap. 39.

Hieronymus Fabricius ab Aquapendente. *Operat. Chirurgic.* Cap. 82.

Guillelmus Fabricius Hildanus. Cent. iii. Obſerv. 60. *exempl.* 1 & 2.

Jobus à Meeckeren. *Obſerv. Medico-Chirurg.* Cap. 55.

Acta Eruditorum Lipſienſia. Anno i. Septembr. Obſerv. 6.

Johannes de Muralto. *M. N. Cur. Germ.* Decur. ii. Ann. 3. Obſerv. 151.

Cornelius Solingen. *De arte obſtetriciâ.*

Daniel Meno Matthiæ. *Obſerv. 6.*

François Mauriceau. *Obſervat. ſur la groſſeſſe.* Obſerv. 231.

[1] Cicero. *De Divinat.* Lib. ii.

[2] Plinius. *Hiſtor. Natur.* Lib. vii. cap. 16.

[3] Fridericus Ruyſchius. *Obſerv. Chirurgic.* 22 & 23.

Simon

German phyſician, have aſſerted; and others even at the orifice of the *uterus*, as it ſeems may be inferred from an account in the [1] *Memoirs of the academy of ſciences*; this may, indeed, well increaſe the difficulty: becauſe there muſt be ſuppoſed, in ſuch caſes, a faultineſs of conformation more remote from natural order; and conſequently more monſtrous; from whence it ariſes, that inſtances of them are but very rarely found. But, in fact, no valid objection would be yet afforded, if it be duly conſidered, that there is no cavity of the body, which is not ſubject to ſimilar diſorders; and that theſe membranes may well be found, even in the interior part of the *vagina*; ſince it is certain, ſuch have ſometimes been found in new-born children, growing in the extremity of the *rectum*, and ſtopping up the fundament: which is not leſs againſt the order of nature.

II. The excreſcences which fill, and cloſe, the paſſage into the *vagina*, are of three kinds.

Sometimes they are in the manner of [2] funguſſes, or muſhrooms, which grow in ulcers of the *vagina*, that are foul. Thus, venereal ulcers, or even ſimple ulcers of the *vagina*, oft give riſe to fleſhy excreſcences, which are ſoft and ſpongy; or hard and ſchirrous; large, or ſmall; and round, or long; according to the quality of the lymph, that forms them, the continuance of the diſorder, or the place where they are ſeated.

Sometimes theſe excreſcences [3] are formed, gradually,

Simon Scultzius. *Miſc. Nov. Curioſ. Germ.* Dec. i. Ann. 3. Obſerv. 3.

[1] Memoires de l'Académie des Sciences. Ann. 1705. Hiſtoir. pag. 52.

[2] Nicolaus Tulpius. *Obſervat.* Lib. iii. cap. 33.

Chriſtophorus Vœlterus, *Schol. obſtetric.* Part. ii. cap. 19.

Acta Berolinenſia. *Dec.* ii. *Vol.* v. *pag.* 85.

Acta Eruditorum Lipſienſia. Ann. 1726. *Octobr. pag.* 480.

[3] Antonius Benivenius. *De abditis morb. & ſanat. cauſis.* Cap. 79.

Johannes Wierus. *Obſervat.* Lib. i.

Acta

dually, by the enlargement of the [1] *carunculæ myrtiformes*; or of some one of the *rugæ* of the *vagina*; or by the tumefaction of some one of the vaginal glands; or of some of the adipose *cellulæ* of its *parietes:* and these inlargements, or tumefactions, always come from some obstruction, or callosity; which, by detaining the lymph, gives rise to the inlargement, or the tumefaction of the parts where it stagnates.

In these cases, the excrescences are generally nervous, glandular, or adipose; large, or small; and soft, or hard; according to the nature of the tumefied part; and the degree of inspissation of the lymph, which tumefies it.

Sometimes these excrescences are a kind of wens; or incysted, and steatomatous tumours; which are formed in the *parietes* of the *vagina*; and project into its cavity: and in this case they are always soft, and have their magnitude determined by the duration of the disorder, or by the quantity of the lymph, which forms the tumour by way of congestion.

These excrescences, of what kind soever they may be, happen the most frequently at the orifice of the *vagina:* because that place is most exposed to exulcerations; and provided with *carunculæ myrtiformes*, subject to grow large; which does not, however, prevent their happening, also, sometimes, as accounts show, further in the *vagina*; and even at the orifice of the *uterus*. Since these parts may be exposed to

Acta Curiosorum Naturæ. *Decur.* iii. Ann. i. Observ. 144.

Nicolaus Tulpius. *Observat.* Lib. iii. cap. 34.

I ordered to be cut off, in the case of a woman forty years old, an adipose tumour of a spherical figure, that adhered to one of the sides of the *vagina*, by a considerably large pedicle; and weighed two pounds.

[1] The anatomists, who deny the existence of the *hymen*, pretend, that the *carunculæ myrtiformes* are of a primitive conformation in women: but, as they are deceived in the first article, so they are in the second. When they find the *hymen*, they never find the *carunculæ myrtiformes:* and when they find these *carunculæ*, they find no *hymen:* which proves, that the *carunculæ* are only the jagged remains of the torn *hymen:* which, by rolling themselves up into three or four little balls, form three or four *carunculæ* of this kind.

ulcers,

ulcers, repletions, and incysted, and steatomatous tumours.

III. Lastly, the *cicatrices*, which connect and unite together the *parietes* of the *vagina*, or the lips of the *vulva*; and which destroy the hollow of these cavities; are always the effects of exulcerations, or divisions of the substance of these parts; when care is not taken to deterge them, and keep them at a distance, by a proper dressing. It is thus, [1] venereal cancers; [2] excoriations, caused by the acrimony of the urine in young children; large pustules of the small pox; [3] accidents of burning; divisions, occasioned by any [4] wound, or by [5] hard labour, &c; have often given rise to these preternatural unions of the lips of the *vulva*, the sides of the *vagina*, and even the orifice of the *uterus:* as appears from the accounts that have been quoted.

As the lips of the *vulva*, and the orifice of the *vagina*, are the parts most exposed to lacerations, wounds, ulcers, &c; they are consequently the places the most liable to be united, and connected, contrary to the natural conformation. But the same accident may happen, also, further in the *vagina*, and some-

[1] Antonius Benivenius. *De abditis morb. & sanat. cansis.* Cap. 31.

[2] Ilbrandus de Diemerbroeck. *Anatom.* Lib. i. cap. 26.

Johannes Nicolaus Pechlinus. *Observat. Medico-physicar.* Lib. i. cap. 25.

[3] Paulus de Sorbait. *Ephem. Curios. Natur. Decur.* i. Ann. 3. Obsery. 273.

[4] Gregorius Horstius. *Operam.* Tom. ii. Lib. iv. Obsery. 55.

[5] Marcellus Donatus. *De medicâ historiâ mirab.* Lib. vi. cap. 2.

Johannes Riolanus, pater. *Art. lenè medendi.* Sect. iv. Tract. 2. cap. 1.

Casparus Bauhinus. *Theatr. Anatom.* Lib. i. cap. 39. Et *De Hermaphroditis.* Lib. i. cap. 38.

Felix Platerus. *Observat.* Lib. i. pag. 258, 259.

Guillelmus Fabricius Hildanus. *Observat.* Centur. vi. Obsery. 67.

Johannes Riolanus, filius. *Enchirid. Anatom.* Lib. ii. cap. 37. Et *Anthropograph.* Lib. ii. cap. 35. pag. m. 197.

Thomas Bartholinus. *Historiar. Anatom.* Cent. ii. Histor. 31.

Rudolphus Jacobus Camerarius. *Misc. Nov. Curios. German.* Centur. ix. & x. Obsery. 73.

Johannes Conradus Beckerus. *De παιδοκλονίᾳ inculpatâ.* §. xviii. & *seqq.*

times

times even in the orifice of the *uterus*; ſuppoſing there happen previouſly, in the ſame place, any of the accidents, of which we have been ſpeaking.

To proceed, this union muſt be more cloſe, or more looſe; deeper, or more ſuperficial; and more or leſs extenſive; according as the exulcerations, excoriations, or wounds, which have preceded, have been more or leſs large; more or leſs neglected, &c: which muſt introduce a conſiderable variety in the particulars of theſe circumſtances.

§. III. DIFFERENCES.

I. A principal difference, among the faults of conformation, that may happen to the *vulva*, or the *vagina*, ariſes from their nature. It has been above proved, that theſe faults may be of three kinds: that moſt frequently, they are owing to a membrane, that cloſes the paſſage of the *vagina*, by coming acroſs it: ſometimes to an excreſcence, which fills, and ſtops it up: and laſtly, at other times, to the uniting of the *parietes* of the *vagina*, or of the lips of the *vulva*, which deſtroys the paſſages.

II. Another difference, among theſe faults of conformation, is taken from their origin: for ſome are from the time of birth, and belong to the primitive conformation: as the membranes placed acroſs the *vagina:* and others come from accident, after the birth: as the excreſcences, which cloſe the paſſages of the *vagina*; and the *cicatrices*, which unite the *parietes* of the *vagina*, or the lips of the *vulva*.

III. A third difference, among theſe faults of conformation, ariſes from the nature and number of functions, which are injured by it. In order to judge of this matter, conſideration muſt be had to the five different functions, that theſe male conformations may affect menſtruation, coition, conception, delivery, and the diſcharge of the urine.

1°. *Menſtruation.* Sometimes the *menſes* are diſcharged freely enough, notwithſtanding theſe obſta-

cles: becauſe they have a ſufficient paſſage. Sometimes they are only diſcharged ſlowly, and with difficulty; becauſe the paſſage is ſtraiter: and ſometimes they are not diſcharged at all; becauſe the paſſage is intirely ſtopt up.

2°. *Coition.* Theſe obſtacles are conſtantly injurious to it, when they are in the *vulva*, or at the orifice of the *vagina:* but they are not ſo, or only in a ſmall degree, when they are at the orifice of the *uterus*; or even placed conſiderably far in the *vagina.*

3°. *Conception.* It is always leſs eaſy, on account of theſe obſtacles, of whatever kind they may be: but it is, nevertheleſs, poſſible, ſo long as they do not cut off all ſort of communication with the *uterus*; or, at leaſt, do not prevent the uſe of coition. There are, moreover, accounts, which ſhow, that conception has taken place ſometimes, even in theſe caſes.

4°. *Delivery.* The faults of conformation, which only render the paſſage narrower, make the delivery more difficult, more long, or hard: and thoſe, which intirely cloſe it, make all delivery impoſſible; at leaſt, unleſs by the conſequences themſelves of the tumefaction of pregnancy, the *cicatrices*, which unite the *parietes* of the *vagina*, or which cauſe a ſtricture there, are either unlooſened, or ſtretched of themſelves, before the [1] time of delivery: as ſome accounts furniſh inſtances.

5°. *The diſcharge of the urine.* There is no reaſon to fear, that thoſe obſtacles, which are in the *vagina*, or at its orifice, may be injurious to the diſcharge of the urine: becauſe the opening of the *urethra* is placed on the outward ſide of it. As to thoſe, which may happen in the *vulva* itſelf, it is very rare, that the urine does not preſerve a ſufficient paſſage: and

[1] Guillelmus Harveus. *De partu.*

Thomas Bartholinus. *Hiſtoriar. anatomic.* Cent. v. Hiſt. 43.

Franciſcus Paullinus. *Ephem. Curioſ. Natur.* Dec. ii. Ann. 7. in *appendice,* Obſerv. 9. D. 2.

Mémoires de l'Académie des Sciences. *Année* 1712. Hiſt. pag. 37.

I know

I know of only [1] one account that asserts the contrary.

6°. There are many other cases more complicate, where it happens, that the faults of conformation, of which we have spoken, injure two, three, or four of these five functions, at the same time. But it seems unnecessary to dwell on the particular examination of them: because these combinations have nothing, but what is easily conceived, when the simple facts, of which we have been speaking, are known.

§. IV. SYMPTOMS.

1°. The faults of conformation, of whatever kind they may be, do not cause any accident in girls, so long as they are not of an age to have the *menses*: because they do not injure any function.

2°. They continue, without causing any accident, even when the *menses* do take place, supposing they do not intercept the discharge, or so long as the girls are not called upon to perform other functions; that is to say, so long as they remain virgins.

3°. If, however, the girls come to have commerce with men, it may then be, that these faults of conformation, either hinder coition, conception, delivery, or all three at the same time, according to their situation, and nature.

4°. But if these faults of conformation close intirely the *vagina*, and detain the *menses*, the accidents, which they will cause, must begin to appear, as soon as the *menses* begin to take place. These accidenes, at first, give reason to believe, that there is a difficulty in the patients first having the *menses*: because they see those periodical inconveniencies, which mark the approach of the *menses*, return every month, without their ever appearing to be discharged.

5°. These suspicions are augmented by the collection of blood retained in the *uterus*, swelling, distend-

[1] Apud. Gregor. Horstium, *Operum.* Tom. ii. Lib. iv. Observ. 55.

ing, and rendering it painful: and these new symptoms are, for a long time, regarded as proofs of obstructions, that are supposed to be in the *uterus*.

6°. But at length the belly swells so greatly; and the blood contained in the *uterus*, in consequence of weighing on the *vagina*, constrains so much the return of that, which comes back from the *vulva*; there must frequently result a kind of œdematous tumefaction; which gives occasion to the forming new suspicions.

7°. As the tumefaction in the belly answers to the place of the *uterus*, and has all its extent, and the same circumscription, it is not surprising, that the patients should be often suspected of being with child.

8°. In proportion as the *uterus* tumefies, it presses more and more the iliac veins, which retards the return of the blood, that should come back from the inferior extremities; and cannot fail, in the end, to bring an œdematous swelling of the feet; and even of the legs, and thighs.

9°. When the *uterus* cannot any longer dilate itself sufficiently, to continue to receive freely, every month, the *menses*, which are ready to be evacuated, the patients must be in the same state, as if the *menses* were suppressed: and must, consequently, as has been said in the fourth chapter, fall into a distate for food; the *pica*, and *malacea*; bad digestion; nauseas; vomitings; &c.

10°. It must necessarily follow, that the blood, evacuated into the cavity of the *uterus*, must there gradually contract, from the heat of the place, a degree of putrefaction; which will be greater, or less, according to the quality and state of the blood. And correspondently to this the blood, which is discharged from the *uterus*, in these cases, by the means of incision, is, as will be related a little lower, always corrupted, fœtid, and half purulent.

11°. The pains in the *abdomen*, with which the patient is afflicted, the bad digestions she suffers, the mixture of the parts of putrid blood, with which the

lymph, that circulates in the lymphatic veins of the *uterus*, is charged, muſt all contribute to cauſe a feveriſh motion, commonly continued, but ſlight, and ſubject to irregular, and odd paroxiſms, in conſequence of the concurrence of different cauſes, which render various the returns, and the violence of it; and it is this which characteriſes the ſlow erratic fever.

12°. In women, and girls, who already have the *menſes*; and in whom theſe faults of conformation only come from an accidental cauſe, and can, therefore, only be of the ſecond, or third kinds; nearly the ſame ſymptoms are found to occur, when theſe faults cloſe up the *vagina*, or the *vulva*, ſufficiently to detain the *menſes*; but they are found to occur then more ſuddenly, and with greater violence; becauſe the *menſes*, which have taken place a long time, and which are more copious, have ſooner filled the cavity of the *uterus*; and bring on more quickly, and in a greater degree, all the accidents mentioned.

§. V. DIAGNOSTIC.

I. The faults of conformation, which are from the time of birth, or, in other words, the membranes placed acroſs the paſſage, are not to be perceived in children; at leaſt, unleſs they be in the *vulva* itſelf, of which there are no inſtances. For the moſt part, thoſe which are in the *vagina* are only diſcovered when the girls, having attained the age of puberty, begin to have the *menſes*; if the faults of conformation occaſion the diſcharge of them to be intercepted: or when they come to have commerce with men; if theſe conformations, without ſtopping the *menſes*, prevent, nevertheleſs, coition.

They are often not diſcovered, even when they prevent the diſcharge of the *menſes*; or, at leaſt, not till very late; and after having, a long time, given ſuſpicion, that the [1] patients are pregnant; though with-

[1] Johannes Wierus. *De præſtigiis Dæmonum.* Lib. ii. cap. 38. *Caſus ſecundus.*

without cauſe; or are afflicted with a dropſy, from which they are free. And when the girls are married, it ſometimes happens, alſo, that the inexperienced huſbands are a long time before they can comprehend what it may be that oppoſes their conſummation, without having the courage to communicate the cauſe of their uneaſineſs to any perſon.

Whenever, nevertheleſs, a girl appears not to have the *menſes*, notwithſtanding ſhe finds herſelf to have every month the common ſymptoms of menſtruation, and that her belly ſeems to grow big, from day to day, without cauſe, there is then reaſon to have ſuſpicion of ſome fault of conformation. But, whenever this firſt ſuſpicion prevails in any degree, the ſimple examination of the exterior ſtate of the *abdomen* muſt furniſh the elucidation that may be deſired: for if the *uterus* alone appear ſwelled, and forming a tumour that is ſpherical, equal, and ſoft; and no motion be perceived in it, although it be preſſed; it is a criterion, that there is no child in the caſe; and that the *uterus* muſt be full only of water, or blood; which is a ſufficient ground of reaſon, for examining the paſſage of the *vagina*; as the ſtate of it will afford the means of a full deciſion of the matter.

II. Among the faults of conformation, that are accidental, the excreſcences of the *vagina*, which are produced gradually, by way of congeſtion, may be a long time concealed in girls where they are formed; and in married women likewiſe; if they be formed in the further part of the *vagina*. As, therefore, it ſcarcely ever happens, that theſe excreſcences are large enough to intercept the *menſes*, or, at leaſt, not till after a long ſpace of time, women have frequently tumours of this kind in the *vagina*, ſuch as wens, or tubercles, without the leaſt ſuſpicion of it.

Bartholomæus Cabrolius. *Obſerv. Medic.* 23.
Guillelmus Fabricius Hildanus. *Centur.* iii. *Obſerv.* 60. *Exempl.* 3.
Johannes de Muralto. *Ephem. Cur. Natur.* Decur. ii. Anno 3. Obſerv. 151.

III. It is not so, however, of *cicatrices*, which injure the lips of the *vulva*, or the *parietes* of the *vagina*. As they are, always, the consequence of a laceration, exulceration, wound, or burn of these parts; which has been imprudently neglected; it is impossible not to be apprized of them. This is, indeed, of all the faults of conformation, that of which the patients are the best informed.

IV. Of whatever nature may be the faults of conformation, and in whatever part they may be found, nothing is more easy, when there is the least suspicion of them, than to obtain a certainty of their existence; and to discover, at the same time, their nature, and their place. There is nothing more required, than to examine the *vagina*, by introducing the finger into it, rubbed previously with oil, or pomatum. But if that be not sufficient, a *speculum uteri* may be used, or some other more simple instrument for dilatation, in order to be able, by means of the dilatation of the *vagina*, to judge, by the sight, of what the touch could not decide.

V. With relation to the causes, it is almost unnecessary to bring them in question: because this knowledge has very little influence on the prognostic, or the method of cure. If, nevertheless, it be regarded as a material subject of enquiry, some light may be procured on this article, by comparing, with the theory above given, what may have been discovered of the nature and kind of the disorder; and what the patient may be acquainted with, relative to the causes which have preceded it.

§. VI. Prognostic.

The prognostic turns upon two points, the danger into which the faults of conformation may throw the patients; and the difficulty which there is to find a remedy for them.

I. The danger can only arise from the retention of the *menses*, in girls, and in women, who are not with

child; and, from the difficulty of delivery, in those who are.

1°. With regard to the retention of the *menses*, the deplorable accidents, into which it may bring the patients, have been shewn before. Therefore, the more the faults of conformation are capable of retaining the *menses*, the more reason there is to apprehend danger.

It follows from thence, that the membranes, which close the *vagina* intirely, without leaving any passage at all, are always more dangerous, than those that are perforated with any holes, or in which some opening remains; and which consequently do not close up so perfectly the *vagina*.

That the membranes, which close the *vagina* intirely, are more dangerous than the other faults of conformation, such as excrescences, and *cicatrices*; which seldom ever intercept the passage of the *menses*, in so absolute a manner.

Finally, that the *cicatrices*, which unite the lips of the *vulva*, or the *parietes* of the *vagina*, are generally more dangerous than the excrescences: because they leave less passage to the *menses*.

2°. With regard to the difficulty of delivery, the faults of conformation, most to be feared, are those, which are most repugnant to giving way, and being surmounted.

From whence it results, that, all other things being equal, the membranes, that are dense, compact, and callous; are more dangerous, than those which are fine, thin, and easy to be torn.

That the little superficial excrescences, which are fat, or soft, are less dangerous than those, which are large, hard, and schirrous.

Finally, that the *cicatrices*, which are lax, superficial, and of small extent, are less dangerous, than those which are close, strait, and large.

II. The difficulty of the cure depends principally on that of the operation; which must be performed, to remedy the faults of conformation.

Thus,

Thus, the membranes, that are eaſy to be cut, are, of all the faults of conformation, the moſt eaſy to be cured; eſpecially, when they are at the entrance of the *vagina:* for the operation becomes more difficult, when they are deeper.

Thus the excreſcences are more difficult to cure: becauſe there is moſt trouble in taking them away, either by the knife, or corroſives: particularly when they are big, deep, ſchirrous, or connected by a large and thick pedicle.

Thus the *cicatrices* are very difficult to cure; becauſe it is very difficult, to be able to diſſect two membranes conjoined together: eſpecially when they adhere cloſely in a large extent, and at the further part of the *vagina.*

III. I do not apprehend it to be neceſſary here, to beſtow any conſideration, either on the obſtacle, the faults of confirmation may afford, to the diſcharge of the urine; becauſe it has been already remarked to be a very rare caſe; or the prevention of coition: becauſe it ſhould not have a place in the enumeration of dangers; although it is an evident cauſe of barrenneſs; and muſt, on that account, be regarded as a real diſeaſe in married women.

IV. But there remains, among the ſeveral conſequences, that the faults of conformation may have, two very dangerous caſes, of which it is proper to take due notice. The one, when the excreſcences of the *vagina* become painful, and ſubject to frequent ſhootings; and threaten to turn cancerous: the other, when the blood, detained in the *uterus*, and *vagina*, compreſſes theſe parts; and ſtops the courſe of the blood in them to ſuch a degree, that there is reaſon to apprehend a mortification: and this caſe is more common; eſpecially when it has been too long neglected to procure a paſſage out for the blood, which ſtagnates in the *uterus.*

§. VII. *Method*

§. VII. *Method of cure.*

Though the faults of conformation, which detain the *menſes*, have great relation to each other, they require, nevertheleſs, methods of cure ſo materially different, as to render it neceſſary to explain them ſeparately.

I. To imitate the practice of [1] Hippocrates, nothing ſhould be employed to deſtroy the membranes which cloſe the *vagina*, but *eſcarotics*. In order, however, to ſucceed, ſuch as are more efficacious, than thoſe he propoſes, ſhould be employed. But it is now a long time ſince it has been well underſtood, that the uſe of theſe remedies tends only to render the cure tedious, difficult, and dangerous. Every body agrees, at preſent, that there is no way ſo quick, and ſafe, as to open theſe membranes by inciſion.

To this end, the patients are placed on the edge of a bed, or ſeat; and, if there be any reaſon to miſtruſt their reſolution, their hands and feet ſhould be tied in the ſame manner as in the operation for cutting. After which, the lips of the *vulva* being ſeparated, an inciſion is made in the membrane, which preſents itſelf, from the top to the bottom, with a biſtory, or a large lancet. When this membrane is thin, one longitudinal inciſion is ſufficient: becauſe the ſides either tear, or are effaced of themſelves: but when it is hard, callous, or thick, another muſt be made croſswiſe; in order to render the entrance of the *vagina* perfectly free, by this kind of crucial inciſion.

It is rare, that the inciſion occaſions any hæmorrhage: becauſe the blood-veſſels, which ſupply this kind of membranes, are neither numerous, nor large. It is, nevertheleſs, uſeful to have ſome aſtringent ready; as dragons blood, bole, or alum, reduced to powder, and beaten up with the white of an egg; in order to be uſed, if there be occaſion, by dipping in it compreſſes, with which the entrance of the *va-*

[1] Lib. *de Sterilibus:* Et Lib ii. *De morbis mulierum.*

gina

gina is to be covered. If there happen to be no hæmorrhage, as there ſeldom ever will in this caſe, an anodyne digeſtive ſhould be uſed at firſt, compoſed of the yolk of an egg, turpentine, and oil of roſes; and ſpread on pledgets, which are put over the *parietes* of the *vagina*; and continued till the perfect cure: which will generally be made in a ſhort time.

In girls, with whom the *menſes* have been retained for ſome time, the membrane, which ſtops them, is ſtrongly forced outwards: which occaſions its preſenting itſelf better; and being more eaſily cut: but the blood, nevertheleſs, which begins to flow out as ſoon as the inciſion is begun, often embarraſſes, and obſtructs the operator. The moſt ſhort method, in this caſe, is to let it run out; and even, if there be occaſion, to ſet the patient on her feet, in order to facilitate the diſcharge; to wipe the *vagina* afterwards; and to finiſh the operation, at laſt, with the proper circumſpection. But, in this caſe, it is neceſſary, after the operation, to make injections into the *vagina*; and even into the *uterus*, with barley water, and a little honey of roſes; which muſt be repeated from time to time, at leaſt once a day. There may even be ſubſtituted, if it be neceſſary, ſome more deterſive injection; as the decoction of the leaves of agrimony, horehound, or birthwort, with the honey of roſes.

When the membrane is not placed at the entrance of the *vagina*, but further in it, the operation becomes more difficult; the *parietes* of the *vagina* muſt be then opened, and kept diſtended, by ſome dilating inſtrument, or a *ſpeculum uteri:* the biſtory, or lancet, made uſe of, guarded by a fillet of linnen; which only leaves the point bare; and laſtly, the inciſion made with care, in proportion as there is occaſion to perform it, in a place more deep, and more narrow. But, theſe things being excepted, it muſt be conducted, in all other reſpects, as has been already directed.

II. If *eſcarotics* be not proper to conſume the membranes, which cloſe the *vagina*, they are yet leſs proper

per to take away the excreſcences that ſtop it up; becauſe that their largeneſs occaſions them to reſiſt yet more to the action of *eſcarotics*. It is not more fit, to endeavour to extract theſe excreſcences, as polypuſſes are ſometimes extracted from the noſe; for theſe kinds of extirpations are always dangerous. The only practice, which is in uſe, and is ſafe, is to take them off, by cutting them.

When theſe excreſcences are at the entrance of the *vagina*, and they may be taken hold of with the left hand, it is eaſy to cut them, by uſing, at diſcretion, ſciſſars, or a biſtory, according to the bigneſs of the pedicle. But it is neceſſary to take great care, to be certain of the poſition of the inſtrument at each ſtroke, before it be made to act. The operation is more difficult, when the excreſcence is further in the *vagina*; as well, becauſe it cannot then be held in a due poſition by the hand; as that it is neceſſary always to have recourſe to forceps, or to crochets: becauſe the place, where there is occaſion to perform the operation, is too narrow, even notwithſtanding the aſſiſtance of the *ſpeculum uteri*: which ſhould never be neglected to be uſed for the dilating the *vagina*.

The excreſcences of the *vagina* may be almoſt always cut, without making any ligature on their neck, or pedicle: becauſe this operation ſeldom brings on any conſiderable hæmorrhage. It is proper, nevertheleſs, to be provided, before hand, with ſome aſtringent; as that we have mentioned in the preceding article; and even with a piece of vitriol, that may be applied occaſionally to the veſſels which furniſh the moſt blood. Nevertheleſs, if the red, or livid colour of the excreſcence, or the varicous dilatation of the veſſels, which are on its ſurface, give reaſon to apprehend the inciſion may be followed with a too great loſs of blood, it would be prudent, in ſuch caſe, to make a ſtrong ligature on its pedicle, by means of a double lace, which ſhould be brought round the body of the excreſcence; and tied faſt about its baſe.

After

After the operation, the firſt dreſſing ſhould be made with dry lint: or, if there be any hæmorrhage, with large compreſſes, charged with ſome aſtringent. The wound is afterwards dreſſed with common digeſtives; and, when the quantity of *pus* diminiſhes, with Arcæus's balſam; which may be mixed, towards the end, with a little green balſam, to render the fleſh more firm: or a little brown unguent, to corrode it; if it be not found. But if, in the beginning, the ſuppuration be too copious; and the wound become foul, and putrid; in order to deterge it, the injections, propoſed in the preceding article, may be uſed; to which may be added, a little vulnerary water, or ſome drops of tincture of myrrh.

III. The ſuperficial *cicatrices*, which make the lips of the *vulva* cohere, unite, for the moſt part, only the exterior edges. In this caſe, by introducing a channeled probe into the opening which remains; and holding this probe ſteady in the line of union of the two lips, it is eaſy to direct the biſtory, by the help of the probe; and to divide them in a very ſafe manner. In other reſpects, this wound is to be dreſſed in the ſame manner, as has been before explained.

With regard to deeper *cicatrices*, which connect the *parietes* of the *vagina*, ſometimes they leave a paſſage of communication, and ſometimes not. In the firſt caſe, it may be attempted to dilate gradually the remains of the paſſage. The trial is generally long, and often in vain, but never attended with any danger. When this method is perſued, it is begun by ſoftning the *cicatrix*, by fomenting it ſeveral times a day, with a ſtrong decoction of the roots of mallows, yellow mallows, water lily, linſeed, &c: even linnen, or fine ſponge, dipt in this decoction, may be kept applied within the *vagina*. When it is judged, that the *cicatrix* is ſufficiently ſoftned, a root of gentian; or, what is better, a ſlice of prepared ſponge; may be introduced into the paſſage, which remains, without diſcontinuing the uſe of emollient fomentations: and, in proportion as the paſſage opens, larger and larger

roots

roots of gentian, or ſlices of ſponge, may be employed, till a proper dilatation has been procured.

This expedient can be of no uſe, when the *cicatrices* leave no degree of communication. It is requiſite, in this ſecond caſe, to have recourſe to the operation; which holds good, even with reſpect to the firſt, when it is perceived to be loſt trouble to ſeek any other remedy. As this operation is nice, and muſt of courſe be long, prudence exacts, that the patients be ſecured, and prevented from making irregular motions, by tying them, as has been mentioned in article the *firſt*.

After having taken this precaution, the cohering membranes muſt be begun to be divided with a biſtory, or more properly ſeparated with a diſſecting knife; which is always difficult, when theſe membranes are united for a great extent. There is ſcarcely occaſion for a dilating inſtrument, if the operation is to be performed at the entrance of the *vagina:* but there is a neceſſity for employing one, if it be further within. After the operation, the firſt dreſſing is to be made with lint, dry; or charged, if there be occaſion, with ſome aſtringent; common digeſtives are employed afterwards; and at laſt, the balſam of Arcæus, either alone, or mixt with a little green balſam, as there may be occaſion.

IV. When the membranes, excreſcences, or *cicatrices*, are placed quite at the orifice of the *uterus*, there are no means of remedy to be had. No ſurgeon can undertake to conduct rightly the biſtory at this depth, and in this obſcurity: nor, conſequently, can be raſh enough, to make inciſions, blindly, in parts ſo delicate as the orifice of the *uterus*; of which the wounds may be fatal; and are ſo, indeed, almoſt always. The only meaſure, that can be taken, is, to leave to nature the cure, or, at leaſt, the alleviation of the bad conſequences to the patients. There is nothing to be apprehended from them, if the *uterus* be empty; and, if it be full of blood, from the retained *menſes*; or what is more rare, but not, however, without inſtance, if it contain a child, of which it muſt be delivered; there

there is room to hope, that, in consequence of its own dilatation, it may open, at last, of itself; and overcome the obstacles that stop up its orifice: the possibility of which is confirmed by [1] accounts.

Precautions necessary to be taken in the performance of the operations which have been spoken of.

I. These operations should never be undertaken, but after having bled, and purged the patients some days before. A longer preparation is necessary, when the extirpating excrescences, or dissecting *cicatrices*, are in question: particularly, if the patient be of a bad constitution; or the retention of the *menses* have extenuated them; or brought on bad accidents.

II. When there is only a simple stricture, or contraction of the passage, caused by a *cicatrix* in the *vagina*, it is not fit to have recourse hastily to the operation. Supposing, even, that the patient was actually with child, it is proper to see, if, in the course of pregnancy, as the *uterus* inlarges, rarefies, and dilates, the same changes may not happen proportionably in the *vagina:* in which its cavity would open of itself; and there is room to hope for this, after the instances which some [2] accounts afford.

III. In every case, it is always time enough to have recourse to the operation, which may be performed

[1] Johannes Riolanus. *Anthropograph.* Lib. ii. cap. 35.

Stephanus Blancardus. *Collectan. Medic. physic.* Centur. iii. Observat. 56.

Mémoires de l'Académie des Sciences. *Anno* 1705. Histoire, *pag.* 52.

[2] Aristoteles. *De Generatione animalium.* Lib. iv. cap. 4.

Franciscus Paullinus. *Miscellanea Curiosor. Naturæ.* Decur. ii. Anno 7. in *Append.* Decad. ii. Observ. 9.

Michael Pauli. *Miscell. Curiosor. Natur.* Decur. iii. Anno 7 & 8. Observ. 83.

Thomas Bartholinus. *Historiar. anatomic.* Centur. v. Histor. 43.

Guillelmus Harveus. *Exercitat. de partu.* pag. 518.

Mémoires de l'Académie des Sciences. *Anno* 1712. *pag.* 37. de l'Histoire.

without danger, even in the laſt months of pregnancy. I only adviſe, not to defer it till too late, for fear the inflammation, which the operation may bring on the *vagina*, and which would contract the cavity, may render the labour more hard. My opinion is ſtill more oppugnant to the delaying it, till the time of delivery itſelf: becauſe it is to be feared, that the vain efforts the child would be ſuffered to make againſt an obſtacle, that it could not ſurmount, might be fatal both to itſelf, and the mother.

IV. In this operation, great care muſt be taken, not to wound the coats of the *vagina*. Wherefore, when this membrane is to be cut, it is neceſſary, in order to ſecure the higher part of the *vagina*, with which the bladder coheres, to begin the inciſion there; to make it with a biſtory; and to keep the back of the biſtory turned from that ſide. As to the oppoſite ſide of the *vagina*, which adheres to the *rectum*, it is neceſſary to avoid puſhing the inciſion intirely to the end, in order not to reach even the coat of the *vagina*.

V. In extirpating the excreſcences, care muſt be taken not to cut them too near, without being very ſollicitous about a portion of the baſe, or pedicle, which may remain: becauſe it diſperſes of itſelf, by the ſuppuration; or at all events, it is eaſy to conſume it by ſlight *eſcarotics*.

VI. When there is occaſion to ſeparate the *parietes* of the *vagina*, which cohere in conſequence of ſome *cicatrix*, it is proper to divide them in the very place where they do cohere. For it may be well judged, how great the miſchief would be, if either of its ſides were punctured; or even if it was made ſo thin, that it could not any longer bear, without dilaceration, the dilatation which it muſt undergo in delivery.

VII. It reſults from hence, that theſe operations, eſpecially the two laſt, are extremely nice: that they demand time, care, and dexterity; and that the object is, with reſpect to them, to be leſs ſollicitous about performing

forming them quickly, than about performing them well.

VIII. Finally, too much caution cannot be uſed, to prevent a new conglutination of the *parietes* of the *vagina*, at the time the wound begins to heal. This conglutination is ſcarcely to be apprehended in the ſimple inciſion of membranes: but it is very much ſo in the extirpation of excreſcences; and yet more in the diſſection of *cicatrices*. There are various means, however, by which it may be prevented. Some make uſe of a fine ſponge, cut into a long piece, and dipt in the ointment of *diapalma*, or of tutty, melted with a ſufficient quantity of oil of ſweet almonds; and introduced into the *vagina*. Others employ a roller of linnen moderately hard, and of a ſize proportioned to the dilatation of the *vagina*, which is dipt in the ſame unguents; and introduced in the ſame manner. There are, nevertheleſs, ſome who prefer the uſe of a roller of thin leaden plate, perforated with many holes, ſpread over with the ſame unguents, or plaſters; and placed in the *vagina*, after the ſame manner. Theſe means are all good: becauſe they are all proper, to hinder the coats, or ulcerated *parietes*, from cohering during the cicatrization. It is neceſſary to repeat theſe applications, only once every day; and to keep them in their place, by the help of a proper bandage; or, what is more ſafe, to make the patients keep their bed, till the cure be completed; in order the better to retain in its place, what has been introduced into the *vagina*.

CHAP. VI.

Of difficult, and laborious menſes.

§. I. DIFFERENCES.

IN a ſtate of health, the *menſes* ſhould come, continue, and go away, without any accident; or, at leaſt, without any ſuch as is momentous. It is, therefore, really a diſeaſe, to have difficult, and laborious *menſes*; that is to ſay, ſuch as have the eruption preceded, or attended, with ſymptoms ſo bad, as to demand the help of medicines.

Theſe ſymptoms are commonly, pains in the loins, thighs, or hips; tumefactions in the *vulva*, *vagina*, or hæmorrhoidal veſſels; tenſion, and acute pains, or throws of colic, in the *uterus*; diſorders of the appetite, and digeſtion; ſhiverings, and *rigors*, over all the body: as alſo convulſive accidents; and ſometimes even complete attacks of the hyſteric paſſion.

It may well be conceived, nevertheleſs, that the *menſes*, which are laborious, are not always equally ſo; nor in the ſame manner; in all the women, who are ſubject to them. They vary, indeed, even in the ſame ſubject.

I. Sometimes they terminate in a natural, and regular diſcharge: ſometimes in a flooding: and ſometimes in an imperfect diſcharge; ſuch as is either not ſufficiently long, or not ſufficiently copious.

II. Sometimes the pains, and the labour, begin before the eruption of the *menſes*; and ceaſe as ſoon as the diſcharge takes place. Sometimes they continue during the diſcharge, but ceaſe when it is finiſhed: and ſometimes, alſo, they laſt after the diſcharge is over; and do not go away till ſometime after, and by degrees.

III. In ſome women, the laborious *menſes* are followed by the *fluor albus* for ſome time; and, in others,

they ceaſe, without leaving any conſequence, more than in perfect health.

§. II. CAUSES.

The tumefaction, and tenſion of the *uterus*, in the laborious *menſes*; and the pain which the patients feel in that part; prove two facts. The one, that the blood-veſſels of the *uterus* are full of blood to a very great degree: the other, that the blood, which fills theſe veſſels, has a difficulty in being diſcharged into the cavity of the *uterus*, through the veinous *appendices*; and, conſequently, is always diſcharged too late; and ſometimes even only in an imperfect manner.

The *firſt* fact is according to the order of nature. The vermicular veſſels of the *uterus* muſt be filled with the milky lymph in the period of one month; when they are full, they muſt compreſs the neighbouring veins: and they muſt alſo, by compreſſing them, obſtruct there the blood; and give riſe to that local *plethora*, neceſſary to provoke the *menſes*.

It is not the ſame with relation to the *ſecond* fact. On the contrary, the natural mechaniſm of the *menſes* requires, that the blood accumulated in the veſſels, is diſcharged into the cavity of the *uterus*; and with a certain facility. The order of nature is, therefore, diſturbed, when this diſcharge is made with difficulty; and when it is made too late, or only imperfectly: and it is this diſorder, which, by cauſing a too great, or too long *plethora* in the *uterus*, renders the *menſes* difficult, and laborious.

There is conſequently nothing wanting, but to determine the cauſes, which may prevent the blood accumulated in the veſſels of the *uterus* from being diſcharged through the extremities of the veinous *appendices* in the time of the *menſes*, and with the due facility. But it is evident, that theſe cauſes may be reduced to three general claſſes. I. To the faultineſs of the *appendices*, by which the diſcharge ſhould be made; that refuſe too long a time, to open themſelves;

ſelves; or do not open ſufficiently to let out the blood as is requiſite, when it may be ſuppoſed, the blood was, as to itſelf, ready to flow. II. To the faultineſs of the blood, which ſhould be diſcharged, but is not in a ſtate to be ſo, either ſo readily, or ſo copiouſly, as it ought, when the *appendices* open as commonly. III. To the concurrence, both of the faultineſs of the veinous *appendices*, whoſe opening is neither ſufficiently ready, nor ſufficiently great; and of that of the blood, which is neither diſcharged with ſufficient quickneſs, nor copiouſneſs.

I. The veinous *appendices* refuſe too long to open, or only open imperfectly, from different cauſes.

1°. Becauſe they are too denſe, cloſe, and elaſtic; which is often the caſe in young girls; and, indeed, in thoſe, alſo, who are older, and have never yet had the *menſes* regularly.

2°. Becauſe the internal coat of the *uterus*, which ſurrounds the extremities of the veinous *appendices*, is too nervous, thick, and compact, which is often found in the ſame caſe.

3°. Becauſe there are in the *uterus* obſtructions, tubercles, and *ſchirruſſes*, which compreſs the *appendices*, and hinder them from being able to dilate; in order to their opening, as quickly, and as much, as is requiſite.

4°. Becauſe the *uterus* is in a ſtate of *erethiſmus*, or convulſive contraction; which cloſes the veinous *appendices*; and does not permit them to open; or, at moſt, only imperfectly. This laſt cauſe, although more tranſitory, is not leſs real.

II. The blood accumulated in the veinous *appendices* is diſcharged too ſlowly, and in too little quantity, from three cauſes.

1°. Becauſe it is too thick; which occaſions, that it can ſcarcely paſs out through the openings of the *appendices*; ſuppoſing even that theſe openings be of the common magnitude.

2°. Becauſe it is propelled too weakly, and too ſlowly, by the contractions of the heart, and the beatings

beatings of the arteries; which occaſions, that only a ſmall quantity can flow, in an equal ſpace of time, through the ſame openings.

3. Becauſe it is, at the ſame time, too thick, and too weakly propelled; which muſt diminiſh in a double *ratio*, the quantity, that may flow in an equal ſpace of time.

III. Finally, on one hand, the veinous *appendices* open too late, and too little; and, on the other, the blood flows in too ſmall quantity, and too ſlowly, from the concurrence of the different cauſes; which have been particularly explained; and this concurrence is more frequent than is imagined; as has been mentioned in *Chapter IV.*

Reference muſt be made to the ſame chapter, for the particulars of the cauſes, which have been explained: becauſe theſe cauſes are common to the ſuppreſt, and the laborious *menſes*; which differ only in the degree of the effect.

§. III. Differences.

I. As there is no ſuppreſſion, the blood, which is accumulated in the veſſels of the *uterus*, in the laborious *menſes*, muſt attain at laſt, although with difficulty, to dilate, and open the veinous *appendices*. But it may dilate and open them, in three manners: in the degree which the order of nature demands; in a greater, or ſuch in which the dilatation becomes ſometimes a dilaceration; or in a much leſs.

In the *firſt* caſe, the labour of the *menſes* ends at laſt in a natural diſcharge; eſpecially if no faultineſs be ſuppoſed in the conſiſtence of the blood.

In the *ſecond*, a greater or leſs flooding will ſucceed: and this happens commonly in women, with whom the veſſels of the *uterus* have had time to become varicous, in conſequence of being expoſed to frequent repletions.

Laſtly, in the *third*, the diſcharge, which happens, will be leſs than it ſhould be, either with reſpect to duration, copiouſneſs, or both; eſpe-

cially, if the blood be too thick, or propelled too weakly.

II. Every time a natural discharge, or a flooding; that is to say, in the two first cases, which have been explained; happens in the laborious *menses*, the labour of the *menses* must cease, as soon as the discharge takes place: because then the vessels empty themselves. But it only diminishes, without intirely ceasing, when the discharge is imperfect: because then the repletion continues yet, although diminished. It even sometimes happens, the discharge is so inconsiderable, that the *plethora* subsists still after it is ceased: and in this case, the symptoms persevere also; at least the greatest part of them; and do not intirely vanish, but by degrees, in proportion as the blood resumes the ordinary course of circulation.

III. In the laborious *menses*, either the lactiferous vessels of the *uterus* open, and empty themselves during the discharge; or they open and empty themselves after; or they neither open nor empty themselves before, nor after; in such manner, that the milky humour is obliged to stagnate there; or to find a passage into the lymphatic vessels of the *uterus*.

In the *first* case, the laborious *menses* are neither followed by any *fluor albus*; because the milky humour is discharged at the same time, as the blood; nor with any remains of tension in the *uterus*; because all the vessels, as well those of the milk, as blood, are emptied.

In the *second* case, the *fluor albus* succeeds the laborious *menses*; and lasts till the lactiferous vessels are empty; which may be sometimes longer, and sometimes shorter: but no more tumefaction, nor pain of the *uterus* will subsist; because the lactiferous vessels which are empty, do not constrain the course of the circulation of the blood.

Lastly, in the *third* case, there is no *fluor albus* after the laborious *menses*; since the lactiferous vessels do not empty themselves: but the tension of the *uterus* will subsist a long time; and not cease wholly, till the lactiferous vessels be intirely emptied by a kind of

of reſolution; which is made by means of their lymphatic veſſels; and is always conſiderably ſlow.

§. IV. SYMPTOMS.

I. The accidents, that happen in the laborious *menſes*, depend always on one of theſe three cauſes.

The *firſt* is, the repletion of the veſſels of the *uterus*, which is communicated, from one to another, to the neighbouring parts, where the blood is carried by lateral branches, paſſing out of the ſame trunk; as to the broad and round ligament; the parts contained in the *pelvis*; the muſcles which are around the *vagina*, *vulva*, and extremity of the *rectum*; &c. From thence ariſe the pain and tenſion of the *uterus*; the pains of the loins, thighs, and hips; the tumefaction of the *vagina*, *vulva*, hæmorrhoidal veins, &c.

The *ſecond* is the regurgitation of the milky lymph, which, by flowing back into the blood, mixes with the *ſaliva*, and the *leven* of the ſtomach; depraving their purity; and diminiſhing their power: which gives riſe to want of appetite and diſguſt; the *pica*, and *malacia*; bad digeſtion; nauſeas; vomitings; looſeneſſes; &c. As this cauſe can only have place, when the milky humour is not diſcharged, it is, therefore, in that caſe only, the ſymptoms, of which we have been ſpeaking, can be found to happen.

Laſtly, the *third* is, the ſenſation of pain, that is produced in the *uterus*, and, that in conſequence of ſympathetic motions, the mechaniſm of which will be explained hereafter, brings on all the accidents of the hyſteric paſſion in particular; and cauſes ſometimes complete attacks of it, even ſuch as are violent.

II. In general, young girls, who begin to have the *menſes*, are more ſubject to have them laborioufly, than thoſe who have had them for ſome time. Becauſe it is ſcarcely in any, but young girls, that the ſmallneſs and denſity of the veinous *appendices*, as well as the thickneſs and hardneſs of the internal coat of the *uterus*, are found.

III. In general, girls, even thoſe who have had the *menſes* a long time, are more ſubject to have them laborioufly, than women. Becauſe, in girls, the texture of the *uterus* is more denſe, cloſe, and compact, than in women.

IV. Laſtly, the women, who have never borne children, are in general more ſubject to have laborious *menſes*, than thoſe who have had ſeveral. Becauſe, in the women who have had no children, the veſſels of the *uterus* are leſs ſupple, dilated, and diſpoſed to dilatation, than in thoſe, who have been ſeveral times delivered.

§. V. DIAGNOSTIC.

I. The complaints of the patient afford information of the nature, number, and violence of the accidents, which precede, or accompany the *menſes*; and ſuffice to evince, that they are laborious.

II. It is from the patients, alſo, that muſt be learnt, whether the labour of the *menſes* leads to a natural diſcharge, a flooding, or an imperfect diſcharge: whether it ceaſe as ſoon as the diſcharge takes place, or ſtill continue: whether the *menſes* are followed by the *fluor albus*, or not: and, laſtly, whether there remains, or not, in the *uterus*, any ſenſation of pain, or tenſion, in the caſes where no *fluor albus* appears: and hence the patients themſelves furniſh the means of judging what is the kind of laborious *menſes* with which they are troubled.

III. Two different cauſes of the laborious *menſes* are known, and diſtinguiſhed,

1°. By inſpection of the cloths uſed by the women. If the blood can ſcarcely penetrate the linnen, it is a proof, that the difficulty of the *menſes* comes from the thickneſs of the blood. On the contrary, there is reaſon to judge, that it ariſes only from the faultineſs of the veinous *appendices*, when it is imbibed by the cloths: and a proof is thence afforded, that the blood is not of an undue conſiſtence.

2°. By

2°. By a knowledge of the habit of the patient. When the pulſe is weak, low, and beating at great diſtances; and the patient low ſpirited, and heavy; the diſorder ſhould be aſcribed to the thickning of the blood. On the contrary, it muſt, for the moſt part, be attributed to the faultineſs of the veinous *appendices*, when the pulſe is ſtrong, frequent, and quick; and the patient chearful, and active.

3°. By the nature and quality of the diſcharge. The cauſe of the diſorder cannot be imputed to the thickneſs of the blood, when the diſcharge is ſufficiently quick, and copious: and it would be irrational not to impute it to this cauſe, when the diſcharge is much leſs than it ought to be, either with reſpect to duration, or quantity.

§. VI. PROGNOSTIC.

I. The laborious *menſes* are leſs dangerous than the ſuppreſt; but they are never without ſome danger. Experience ſhews, that this danger varies in ſeveral manners.

1°. According to the accidents, which precede, or attend them. As they threaten more in proportion as the accidents are more numerous, violent, and bad.

2°. According to the age of the patients. As they are more eaſy to be cured in young girls than in thoſe who are older; becauſe there is room to hope the veſſels of the *uterus* may extend themſelves gradually in young girls, in proportion as the *menſes* take place; which can ſcarcely be expected in women, who are older.

3°. According to the ſtate of the patients. As the laborious *menſes* are of a worſe nature in married women than in maids; and in women, who have had children, than in thoſe, who have not: becauſe they ſuppoſe, in the *uterus*, or in the blood, a faultineſs, that is greater, more remote from the natural ſtate, and more difficult to be corrected.

4°. Accord-

4°. According to the nature of causes. As the laborious *menses*, which are occasioned by the faultiness of the vessels of the *uterus*, are more obstinate than those which arise from the faultiness of the blood: because it is more difficult to find a remedy for the faultiness of the *uterus*, than for that of the blood. Wherefore the most obstinate of all are, those laborious *menses*, which depend on both the faultiness of the vessels of the *uterus*, and the blood.

5°. According to the long continuance of the disorder. As the longer time there has been, that the *menses* have remained laborious, and the more difficult it is to find an efficacious remedy for them: because the length of the time strengthens the causes which produced them.

II. In general, the laborious *menses*, where the discharge is constantly imperfect, terminate almost always in an absolute suppression; and are attended consequently with all the dangers of a suppression.

III. The laborious *menses*, which are followed with a flooding, degenerate often into such as are excessive: and a proper estimation of danger should be made on that account.

IV. The laborious *menses*, which terminate in a *fluor albus*, often change into a discharge of this kind: and upon that account a due rate should be also made of the danger.

V. The laborious *menses*, where there is no *fluor albus*, but where the tension and tumefaction of the *uterus* are continual, or at least last a long time, give room to dread a *schirrus*, or an inflammation in the *uterus*; which would have consequences more dangerous even than the preceding.

VI. The laborious *menses*, which are followed with a natural discharge, where the pain and tension of the *uterus* cease as soon as it takes place; and where there is no *fluor albus*; are generally the least dangerous, the most supportable, and the easiest to be cured.

§. VII. *Me-*

§. VII. *Method of cure.*

The intentions of cure, which ſhould be propoſed in the treatment of the laborious *menſes*, are the ſame as thoſe which ought to be effected in the ſuppreſſion of the *menſes*; and are confined in the ſame manner; 1°. To correct the faultineſs of the veinous *appendices*, by rendering them more ſupple, ſoft, and *extenſible*; and thence more eaſy to be dilated, and to open: 2°. To augmenting the effort of the blood on the *appendices*, by augmenting its motion, and fluidity: 3°. To provoking the free eruption of the *menſes*, by exciting, in the body of the *uterus*, gentle contractions, or moderate concuſſions, capable of preſſing the *appendices*, and forcing them to open.

The ſame remedies ſhould, therefore, be employed in the treatment of the laborious *menſes*, which have been above propoſed for the ſuppreſſion of the *menſes*; and in the ſame manner. It muſt only be remembred, that they ſhould be employed with more care; and their effects leſs urged; becauſe the diſeaſe, being leſs dangerous, as well as leſs troubleſome, there is more time allowed to repeat theſe remedies; and to adequate the power of them to the degree of reſiſtance they have to overcome.

PRECAUTIONS.

The ſame precautions muſt be obſerved in the treatment of the laborious *menſes*, as in the ſuppreſſion of the *menſes*: on which head, *Chapter IV.* may be conſulted. It is only neceſſary to add,

I. That, as the laborious *menſes* may terminate in three different manners, and lead to three different diſeaſes; it is very important to foreſee, early, the courſe the diſorder muſt take; in order to find a remedy, before hand, for the conſequences there is reaſon to apprehend.

II. That, if it be judged, by the diminution, which happens at every return, of the quantity, and duration of the *menſes*, that the diſorder muſt change into

into a total ſuppreſſion; the uſe of the emmenagogues, which are proper in ſuppreſſions, muſt, in this caſe, be perſiſted in more effectually, and more conſtantly.

III. That, if the increaſe of the diſcharge, which ſucceeds to the labour of the *menſes*, at each return, gives reaſon to foreſee, the diſorder will turn, at laſt, into an actual flooding; it is proper, in this caſe, to moderate the power of the emmenagogues; or even to employ, early, remedies which are proper in the exceſſive *menſes*; to ſuch as will be propoſed below, in *Chapter IX*; or, at leaſt, to join them with the emmenagogue remedies, that are continued to be employed.

IV. That, if the laborious *menſes* be followed with a diſcharge of the *fluor albus*; and this diſcharge goes on increaſing, ſo as to give room to apprehend, the diſorder will take, in the end, that turn; it is neceſſary, in this caſe, to make uſe of remedies ſerviceable againſt the *fluor albus*; on which may be conſulted *Chapter X*; or, at leaſt, to mix ſome of the remedies of this kind with the emmenagogues, of which the uſe is continued.

V. That, if the want of ſucceſs affords reaſon to judge, the laborious *menſes* are kept up by ſome local faultineſs in the *uterus*, that cannot be removed; or, at leaſt, without expoſing the patients to a greater danger; prudence exacts, in ſuch caſe, that the treatment ſhould be then confined to the ſimple palliative cure; which conſiſts only in diminiſhing the violence of the accidents; and preventing the conſequences which they may have; till nature may be habituated gradually to diſpenſe with the want of this evacuation.

VI. The ſame attention muſt be given, whenever the accidents of the *menſes* are bad, or urgent; even when there is room to hope the being able to make an effectual cure: becauſe, in waiting for this radical cure, the palliative muſt not be neglected; in caſes where the nature of the accidents evince the neceſſity of it.

VII. The proper remedies muſt, therefore, be employed in both theſe caſes; 1°. To diminiſh the *plethora*

thora of the veſſels of the *uterus*: 2°. To derive, by other ways, a part of the milky lymph, with which the vermicular veſſels of the *uterus* are ſurcharged: 3°. To leſſen the ſenſibility of the *uterus*; and alleviate the painful ſenſations, which the repletion of the veſſels cauſes there.

Such are, 1°. Diet, to which the patient muſt be ſubjected, in order that they make leſs chyle; and that the chyle, which they may make, may be more thin, and more fit to be taken up again by the lymphatic veins of the *uterus*. It is proper, in the ſame view, to make the patients uſe much exerciſe, if they can bear it; which will tend, at the ſame time, to reſtore the due courſe of the *menſes*, which come with difficulty; and to diminiſh the accidents, which they bring on by this difficulty.

2°. Bleeding, repeated from time to time; in order to diminiſh the quantity of blood, which ſurcharges the veſſels; but always in the arm, to derive the blood from the veſſels of the *uterus*.

3°. Purging, frequently repeated, to evacuate a part of the humours, and prevent a *plethora*: but always with purges, that are moderate, and incapable of bringing on any *erethiſmus* in the *uterus*.

4°. Glyſters, that are emollient, anodyne, purgative, or antihyſteric, according to the particular indications, or the different views which may occur; either of relaxing the *uterus*; emptying the bowels; or mitigating ſome accident of the hyſterical paſſion.

5°. Broths, or apozems, that are dilating, aperitive, diuretic, &c; in order to render the milky lymph more fluid; and more fit to paſs from the vermicular veſſels of the *uterus*, into the lymphatic veins, which ſpring from it: or in order to evacuate a part by urine; nearly in the ſame manner, as a part of the milk is evacuated in the ſame way, in childbed women.

6°. Laſtly, narcotics, joined with antihyſterics; and given ſeaſonably in the height of the colic, which precedes, or attends the laborious *menſes*; with a view to quiet; or, at leaſt, to leſſen the pain of the *uterus*;

and

and prevent the attacks of the hyſteric paſſion, which the pain may bring on.

CHAP. VII.

Of the deviating menſes.

§. I. DIFFERENCES.

WHEN the *menſes* are too late in their firſt eruption in adult girls; ſuppreſt for a long time; retained by ſome fault of conformation; ſlow; laborious; difficult; ſparing; or, in ſhort, when they do not flow, or only in ſmall quantity, and with trouble; it ſometimes happens, that the blood retained, and accumulated in the veſſels, opens, at laſt, a paſſage in ſome other part; by which it eſcapes; or, to ſpeak more properly, *deviates*.

The *menſes* moſt commonly deviate, by the noſe, the lungs, the ſtomach, and the hæmorrhoidal veins; which brings on a bleeding at the noſe, a ſpitting, or vomiting of blood, or an hæmorrhoidal flux. But there is, indeed, ſcarcely any part of the body, by which the *menſes* may not open themſelves a paſſage; and by which, in reality, they do not frequently: as is proved in an almoſt infinite number of accounts, which are found collected in authors.

Sometimes, this extraordinary diſcharge of the *menſes* is as copious, and regular, as the natural. But it is generally leſs copious, or leſs regular; and, moſt frequently, both leſs copious, and leſs regular, at the ſame time. It is, ſometimes, not followed with any bad accident, eſpecially, if it be made by the noſe, or the hæmorrhoidal veins: and, ſometimes, it is accompanied, or followed, by ſuch as are terrible, when it is made by the lungs, or the ſtomach.

Some-

Sometimes, the eruption of the deviating *menſes* is without pain, tenſion, or tumefaction in the *uterus*; or, in ſhort, without any thing, in that part, which ſhews a diſpoſition towards the *menſes*. At others, it is foreſhewn by the tenſion, tumefaction, and pain of the *uterus*, and by other ſymptoms which precede the natural diſcharge of them: and ſometimes, alſo, it is preceded, and attended, not only by a diſpoſition towards the *menſes*, but even by ſome diſcharge through the ordinary ways; but too weak to merit the name of *menſes*; or to produce the advantages of them.

§. II. CAUSES.

So long as the *menſes* fail, only becauſe the blood fails in the body, whatever may be the cauſe of ſuch failure, there is never any reaſon to fear the *menſes* may deviate. The veſſels, in this caſe, far from being full, and in danger of rupturing, are not ſufficiently ſo. But the *menſes* are ſubject to deviate, when the contrary cauſe prevails, to that, to which the failure, or conſiderable diminution of them, is owing. As, then, there is accumulated, in the body, every month, a certain quantity of blood, greater or leſs, which ſhould be diſcharged. This quantity, ſeveral times ſuperadded to the accumulated ſtore, muſt produce, in the end, a *plethora*, capable of forcing ſome partial extremities of the capillary veſſels; and dilacerating them.

It is, therefore, this *plethora*, which is the cauſe, ſolely, of the deviating *menſes*. But as this cauſe is a general one, which acts of itſelf equally every where, it is neceſſary, in order to give riſe to the deviating *menſes*, in one part, rather than another, that it ſhould be determined there by ſome local cauſe, or diſpoſition; which augments the effect, particularly in that part; and among ſuch local cauſes, the following are thoſe, which are the moſt common, and the beſt eſtabliſhed by obſervations.

I. The proximity of the part, by which the *menſes* deviate, to the *uterus*; and the communication by the

ſame

ſame veſſels; which occaſions the repletions, that happen in the *uterus*, to extend themſelves commonly to this part. From whence it reſults, that the *menſes*, which cannot longer be diſcharged by the veſſels of the *uterus*, deviate ſo often by the hæmorrhoidal veins; and ſometimes, even by the veins of the lips of the *vulva*.

II. The delicacy of the ſubſtance of the part, by which the *menſes* eſcape; and the thinneſs of the veſſels, which are diſtributed there; whence their coats yield more eaſily to the repletion, which is made in the part. It is for this reaſon, the *menſes* deviate ſo frequently by the veſſels of the noſe; or by thoſe of the lungs; and cauſe thence periodical bleedings of the noſe; or ſpittings of blood.

III. The faultineſs of conformition in ſome part; which occaſions that the blood-veſſels are there more thin; or the circulation leſs free than they ought to be. In which caſe, the *menſes* muſt deviate by this part, rather than by any other, in conſequence ſolely of this latent, and ſometimes unknown, faultineſs, without any exterior cauſe, or particular accident, which determines them there.

IV. Some wound, exulceration, or ſcratch, in any part, which, by opening, in that quarter, a paſſage to the blood, that is replete in the veſſels, ſuffices to bring on there the diſcharge of the *menſes*; which cannot be made by the ordinary ways. This is the reaſon, why it happens the *menſes* deviate; ſometimes by places in the ſkin; in which it is divided by ſome ſcab, cut, or galling, often very ſlight.

V. Some blow, or contuſion in any part; which, by lacerating ſome capillary veſſels; or bringing there ſome tumefaction, which conſtrains the courſe of the blood; may, in ſeveral caſes, determine the ſuppreſt *menſes* to take that rout. It is thence, that, without any exterior diviſion, the *menſes* deviate ſometimes by places, which have been expoſed to ſome blow, or bruiſe, that has not been thought worthy of notice.

VI. Con-

VI. Concuſſions, contractions, and diſtenſions, that happen to any parts, by diſeaſes, or fortuitous accidents; and which, in conſequence of compreſſing, preſſing, elongating, and doubling back the veſſels, already too full, tear them at laſt; and open, by that means, a way for the evacuation of the *menſes*. It is hence, they are often determined to deviate by the noſe, in conſequence of a cold in the head, which occaſions ſneezing; by the lungs, in conſequence of a cold in the breaſt, which occaſions coughing; by the ſtomach, in conſequence of indigeſtion, that occaſions a vomiting; and by the hæmorrhoidal veſſels, in conſequence of a looſeneſs, or a *teneſmus*, that cauſes too great, and too frequent efforts.

It follows from hence, that the deviation of the *menſes* depends always on two cauſes: the one general, which is the *plethora*, occaſioned by the ſuppreſſion of the *menſes*: the other partial, which is ſome of the local cauſes, or diſpoſitions before mentioned. When theſe two kinds of cauſes concur with a ſufficient degree of force, it is always to be feared, that the *menſes* may deviate, by the part which ſuffers moſt: but this accident is never to be dreaded, except when both theſe kinds of cauſes concur; and in a degree ſufficiently great.

Moreover, in eſtabliſhing here, that the diſcharge of the deviating *menſes* comes from a *plethora* alone, without any particular conformation in the part, in which it is made, nothing is contrary to what is ſaid above, in *Chapter II*, of the neceſſity there is, to admit a particular conformation in the *uterus*, to explain the periodical diſcharge of the common *menſes*: becauſe there are evident differences betwixt theſe two kinds of diſcharges.

1°. The deviating *menſes* never happen, but in conſequence of a *plethora*; and even of a conſiderable one. But this *plethora* ſuffices to force the veſſels without the aid of any particular conformation. Nothing is more uſual, on the contrary, than to ſee the common *menſes* return regularly, without any *plethora*;

and recourſe muſt in this be neceſſarily had to a particular conformation, which ſupplies the place of the *plethora* that is wanting.

2°. The deviating *menſes* are ſeldom ever exactly regular, either as to the time, or duration of the returns; or as to the progreſs, or diminution of the diſcharge. It is not, therefore, ſtrange, that a *plethora* alone ſhould produce them. Their regularity agrees perfectly with the nature of ſuch a cauſe; which is, of itſelf, always unequal, and variable. But the common *menſes* are more periodical in their returns, equal in their duration, and uniform in their manner of beginning, increaſing, and diminiſhing: and it is abſurd, therefore, to attribute to a *plethora*, only, a diſcharge ſo regular. Nor can the admitting, in order to explain it, the particular conformation in the *uterus* which has been ſpoken of, be diſpenſed with: and the more, as it has been confirmed elſewhere, by anatomical obſervations.

3°. Laſtly, the deviating *menſes* lead, almoſt always, to the exulceration of the parts, where they deviate: which proves, that they happen only by the dilaceration of the veſſels, which the *plethora* burſts. On the contrary, the common *menſes* never bring on exulcerations in the *uterus:* which affords a certain proof, that the veſſels are not then, either torn, or forced; but open naturally, by a mechaniſm, that is the conſequence of the particular conformation, which they have in the *uterus*.

§. III. SYMPTOMS.

I. When the *menſes* are ſuppreſt, without occaſioning any repletion of blood in the veſſels of the *uterus*; which is Caſe I. of the ſuppreſſion of the *menſes*; they muſt then deviate without any tenſion, tumefaction, or pain of the *uterus*; or, in ſhort, without any thing appearing, that foretells the approach of the *menſes*.

II. But if it happen, that the veſſels of the *uterus* fill, and are replete with blood; which is the IId and

IIId Caſe of the ſuppreſſion; then the eruption of the deviating *menſes* will be always foretold, by the painful tenſion of the *uterus*; and by the other common ſymptoms of menſtruation.

III. Laſtly, if the blood not only fill the veſſels of the *uterus*, but have, alſo, ſufficient force to dilate, and open them to a certain point, although ſhort of the neceſſary degree; which is the caſe of the laborious *menſes*; the eruption of the deviating *menſes* will be then preceded, and attended, with ſome diſcharge by the ordinary way; but ſuch as is too weak, to be capable of preventing the deviation.

IV. By whatever manner, the *menſes* deviate, the eruption of them will be always preceded by ſymptoms, which happen in ſuppreſſions: but of which, the nature varies, according to the different kinds of cauſes, that produce the ſuppreſſion.

V. As theſe different ſymptoms, which attend the ſuppreſſion of the *menſes*, that precede the deviation, depend only on the *plethora*, it is evident, they will ceaſe, ſo ſoon as the eruption is made in any part; or, at leaſt, that they will diminiſh, in proportion to the copiouſneſs of this eruption: becauſe it is evident, that the *plethora*, which cauſes them, will be diminiſhed by it in the ſame proportion.

VI. It is true, that, properly ſpeaking, theſe ſymptoms belong to ſuppreſt *menſes*, rather than to deviating *menſes*: becauſe there are others, that are proper to deviating *menſes*; which ariſe from the particular repletion, that precedes the eruption; and of which the nature varies, according to the places, by which this eruption is made.

VII. Thus, if it be by the noſe, the patients, as long as the eruption laſts, are ſubject to tumefactions, redneſs, and heat of the noſe; a ſtoppage of the noſtrils, with all the conſequences of it.

VIII. If it be by the lungs, the patients find their breath oppreſt; cannot keep laid down without great trouble; cough almoſt continually; have a heat, and dryneſs in the *thorax*; and often complain of a par-

ticular place that is painful, in the fore-part of the breaſt, one of the ſides, or behind, betwixt the ſhoulders.

IX. If it be by the hæmorrhoidal veins, the patients find great trouble in ſitting, or walking; feel an irritation, heat, and acute pain, in the fundament; are often attacked with a teazing *teneſmus*; and cannot make the proper efforts for it, and much leſs, actually go to ſtool, without ſuffering greatly.

X. If it be by the ſtomach, the patients fall into a diſguſt for food, and ſometimes into qualms, and headach; are thirſty; feel a burning heat in the ſtomach; have frequent *nauſeas*; vomit fluid, or coagulated blood; and void a black ſubſtance, reſembling pitch, which is only blood half digeſted, or, to ſpeak more properly, half putrified.

XI. It is eaſy to imagine the other accidents, which muſt come on when the eruption of the deviating *menſes* is made by other parts; as ſoon as it is known, what are the functions, to which theſe parts are appropriated; and the effects which may be produced there by the tenſion, and the tumefaction of the veſſels that are replete; or of the acrimony, and heat of the blood, which is diſcharged by them, when they are burſt.

XII. In general, by whatever part the eruption is made, it happens, 1°. That it is ſometimes moderate, when there are only a few veſſels which burſt, and are torn; or thoſe which are torn, are only capillary veſſels; and that it is, ſometimes, on the contrary, ſo abundant, as to degenerate into a kind of flooding, when there are a very great number of veſſels open; eſpecially, when among them, there are ſome conſiderably large: 2°. That it is, ſometimes, of ſhort duration, when the lacerations of the veſſels are ſmall; the *plethora* moderate, and ſoon exhauſted; and the lymph ſweet, viſcid, and proper to repair quickly the ruptures of the veſſels; &c: 3°. And, that it laſts, on the contrary, ſometimes for a long ſpace, when the lacerations are large; the *plethora* abundant;

abundant; and the lymph acrid, ſaline, and not proper to conſolidate the lacerated veſſels.

§. IV. DIAGNOSTIC.

I. It may be foreſeen, with certainty enough, that the *menſes* will deviate by ſome part of the body, when they have been ſuppreſt for ſeveral months, in a girl, or young woman, who is full of blood, eats much, uſes little exerciſe, and is in the following circumſtances; and yet more, if ſhe be in ſeveral of them at the ſame time.

1°. If ſhe have, naturally, any weak part, by which the blood has been uſually evacuated.

2°. If ſhe have, in any part; or in ſome place of the ſkin; any wound; cut; or old, and fiſtulous, ulcer.

3°. If it happen to her to have any part, naturally formed in a very weak manner; and often expoſed to any concuſſion, contraction, or extraordinary effort.

4°. Laſtly, if ſhe feel conſtantly, in the parts that are ill diſpoſed, any heat, or irritation; and obſerve there any redneſs, or tumefaction, ſuppoſing the parts are within the reach of the eye.

II. When the eruption of the deviating *menſes* is once made; and appears to be renewed periodically, at the time noted for the return of the *menſes*; the nature of the diſorder cannot be then miſtaken; and nothing is more eaſy, than to judge of the place, the kind, the degree, and the violence of this eruption, as well as of all the other ſigns, that may ſerve to characteriſe it.

§. V. PROGNOSTIC.

I. The deviating *menſes* ſeem, at firſt, to relieve, and indeed even do relieve the patient: becauſe they diminiſh the greateſt part of the accidents of the ſuppreſſion of the *menſes*, which cauſe them; and, in this reſpect, the deviating *menſes* are leſs inconvenient than the ſuppreſt *menſes*.

II. But they are attended, nevertheleſs, with the ſame danger, as the ſuppreſt *menſes*, with relation to the cauſe, which produced them: becauſe this cauſe is abſolutely the ſame.

III. Generally ſuch cauſe is even more difficult to be removed in the deviating *menſes*, than in the ſuppreſt: becauſe, in the deviating *menſes*, the aid of the *plethora*, as in the ſuppreſt *menſes*, is wanting to force the obſtacles which prevent the eruption of blood, by the ordinary way; that is to ſay, by the veſſels of the *uterus*.

IV. For the moſt part, the cauſe of the ſuppreſſion of the *menſes* is never more difficult to be removed, in the deviating *menſes*, than when the patients do not feel, in the *uterus*, any periodical tenſion, tumefaction, or pain; becauſe then no effort is made in that quarter, which may force the obſtacles that are there.

V. But beſides this danger, which ariſes principally, only, from the ſuppreſſion of the *menſes*, or from its cauſe, the deviating *menſes* are attended with others, that are peculiar to them, reſult from the effect they have on the parts, by which they deviate; and muſt be differently eſtimated, according to the difference of the places.

1°. According to the delicacy, or importance of theſe parts. Thus the *menſes*, which deviate by the ſtomach, or lungs, are more dangerous than thoſe, which deviate by the veſſels of the noſe, or by the hæmorrhoidal veins: and theſe are more ſo, in their turn, than thoſe by which the eruption is made in the pores of the ſkin, where there is a ſolution of continuity, by ſome wound, or ulcer.

2°. According to the degree of repletion, which precedes the eruption. Thus, every thing being equal, the deviating *menſes*, of which the eruption is made, without repletion, heat, pain, or even inflammation in the part affected, are always leſs dangerous, than thoſe, of which the eruption is made, with theſe accidents.

3°. Accord-

3°. According to the duration of the diſorder; and even according to the duration of each return. Thus the *menſes*, which have deviated for a long time, and of which the diſcharge laſts a long time at each eruption, are always more dangerous, than thoſe which have deviated a ſhort time; and of which the eruptions are ſhort.

4°. According to the conſtitution, and habit of the patient. Thus the deviating *menſes* are always leſs dangerous, all other things being equal, in the patients of a good conſtitution, whoſe blood is ſweet, and the *viſcera* in a good ſtate, &c. than in thoſe who are cacochymic; whoſe blood is acrid, and ſaline; or in whom there are obſtructions of the *viſcera*.

5°. Laſtly, according to the nature of the change, which the deviating *menſes* make in the part, where the eruption happens. Thus, there is always leſs danger in them, when the eruption ceaſes perfectly, and without any conſequence, or that it is ſucceeded by a running, purely lymphatic, than when it ends in a bloody running; or more eſpecially, a purulent one.

§. VI. *Method of cure.*

In the curative treatment of the deviating *menſes*, the effecting four intentions is to be conſidered. The firſt is to remove the cauſe, which occaſions the deviation, or conduces to its continuance: the ſecond, to prevent, as much as poſſible, or at leaſt to diminiſh, the eruption of them, while more efficacious remedies are ſought for: the third, to correct the acrimony of the blood; mitigate the effects, they may have on the parts where they happen; and prevent their bringing on any dangerous exulceration: and the fourth, to moderate the copiouſneſs of this eruption, in caſe it become exceſſive; and degenerates into an hæmorrhage.

I. The firſt intention can only be effected, by reſtoring the natural courſe of the *menſes:* and to this end, it is proper to employ the remedies which have

been propoſed in *Chapter IV*, for the ſuppreſſion of the *menſes*. But it is neceſſary, to take care, in uſing them, to employ only aperitives, diſſolvents, and moderate attenuants; particularly, if the eruption be made by any important part; as the lungs, or the ſtomach; for fear, that by too much attenuating the blood, and accelerating its motion, floodings may be brought on, that are exceſſive, and difficult to be cured; or, perhaps, even fatal.

If the diſorder happen to a virgin, the moſt certain way of remedying it, is to get her married, if it be convenient; and the ſtate of her health, on the whole, admit of it. Nothing can be more effectual, for bringing back the *menſes* to their natural courſe, without changing the quality of the blood, or accelerating too much its circulation; and, conſequently, nothing can be more efficacious, and more ſalutary in the deviating *menſes*.

II. The ſecond intention is effected by the uſe of frequent bleeding, which by diminiſhing the *plethora*, diminiſhes, in proportion, the effect the blood would otherwiſe exert on the part, by which it is accuſtomed to eſcape. It is very true, that, by bleeding the patients ſo often, the action of the blood is diminiſhed in proportion on the veſſels of the *uterus*; and, conſequently, the advantage that might be expected from that effort, in bringing back the *menſes*. But as experience has already taught, that the blood makes a much greater effort on the part, by which the *menſes* deviate, than on the *uterus*, there is always more to be gained than loſt for the patient, in diminiſhing the *plethora* by frequent bleedings.

All that can be done to recall the blood on the ſide of the *uterus*; and to aſſiſt it in opening again the natural paſſages there, is to bleed, in ſuch caſes, in the foot; and it is conſtantly practiſed, not only when the eruption is made by the ſuperior parts, but even when by the ſtomach, and the hæmorrhoidal veſſels: at leaſt, unleſs when the ſmall appearance of reſtoring the natural courſe of the *menſes*; and the imminent danger

danger of attracting the blood to the weak part, do not dictate the contrary practice: which sometimes happens in the concurrence of the two conditions before proposed: especially, when in a person very plethoric; with whom prudence requires, that some bleedings in the arm should be begun with.

As the *plethora*, which is the only cause, that produces the deviating *menses*, is not the only cause that occasions their return; it being certain, the acrid, and saline quality of the blood contributes much to it, on account of its hindering the perfect reunion of the vessels, which have been once torn and burst; it is necessary to endeavour to sweeten the blood, in order to prevent, effectually, the returns of the eruption, by rendering more perfect the consolidation of the vessels, which have opened; and this leads to the third intention, of which we are going to speak.

III. This third intention, in which it is proposed to correct the acrimony of the blood, is of so much more importance in the treatment of this disease, as the principal danger in the deviating *menses*, arises only from the exulceration, which they bring on in the part, by which they deviate; and as this exulceration cannot be prevented, but by sweetning the acrimony of the blood, to hinder it from exeding the parts by which it escapes.

In this view, it is necessary, to suspend frequently the use of emmenagogues, which have been proposed to fulfill the first intention. But it is proper, also, to substitute for them, from time to time, humectant, diluent, and sweetning remedies; as,

1°. Chicken, or veal broth, with the roots of comfrey, yellow mallows, water lily, harts tongue, turnips, &c; and the leaves of borage, bugloss, lettuce, chickweed *, &c; to which may be even added, in urgent cases, frogs skinned and gutted; or land-tortoises.

* *Alsine.*

2°. Baths,

2°. Baths, or half baths, of warm river water; in which may be boiled, if it be thought proper, ſome emollient plants; or linſeed.

3°. Whey, ſimply chalybeated, and prepared into an infuſion of bitter plants; as chervil, fumitory, centory, germander, &c; or medicated with ſome ſpoonfuls of the depurated juice of the ſame plants.

4°. Mineral chalybeate waters; ſuch as Forges, Camarets, Spa, Caranſac; &c; provided the breaſt be not attacked.

5°. Aſs's or goat's milk, drunk with proper precautions, once or twice a day, after having chalybeated it, by extinguiſhing in it a red-hot piece of iron; and added two or three ounces of the weaker lime water.

6°. Mollifying remedies, ſuited to the particular part where the *menſes* deviate; as pectorals, or oily and mucilaginous ſtomachics, if it be by the lungs or ſtomach; anodyne and deterging lotions, and injections, if it be by the hæmorrhoids; ſternutatory fluids of like quantity, and nearly of the kind, if it be by the noſe; and the ſame with regard to the other parts.

IV. Finally, the fourth intention only comes in queſtion, when the eruption of the deviating *menſes* becomes ſo great, that it merits the name of flooding, and that it require the help of medicines to moderate, or ſtop it. In this caſe, it is neceſſary to employ the remedies, which are proper for the exceſſive *menſes*, and which will be propoſed below, in *Chapter IX.*

CHAP.

CHAP. VIII.

Of the green-ſickneſs, or chloroſis.

§. I. DESCRIPTION.

YOUNG girls, who have never had the *menſes*; or who have only had them late, with trouble, and in ſmall quantity; or girls of a more advanced age; and women, whoſe *menſes* are retarded, diminiſhed, ſuppreſt, retained, or difficult and laborious by diſeaſe, and without being the effect of that age, at which they are loſt; as alſo women with child, in the three or four firſt months of their pregnancy; fall commonly into a ſtate of languor, more eaſily to be deſcribed, than defined.

They loſe their taſte for common victuals, at which they have almoſt a horror; and have, in the place of it, a depraved appetite for odd things, known under the name of [1] *pica* and [2] *malacia*. The digeſtion is ill performed, and with trouble, attended with a load at the ſtomach, and heartburn; and often followed with convulſive motions and murmurings of the bowels; with vomitings and *diarrhœas*; and with tenſion in the *hypochondria*. Some of theſe patients feel, by intervals, pains more or leſs acute in the loins, groins, or hypogaſtric region.

[1] Hanc appellationem affectio ipſa adepta eſt ob picæ animalis varietatem, aut quòd etiam illa ſæpe hac affectione corripitur. *Paulus Ægineta*, De Re Medicâ. *Lib. i. cap.* 1.

Affectio quædam prægnantibus accidit, quæ à picâ aviculâ nomen accepit. Alii tamen ab hederæ ſimilitudine, quæ κιττὸς *Græcis* vocatur, hanc affectionem κίτλαν, hoc eſt, picam appellatam eſſe ſentiunt; nam ſicut illa variis plantis, prout occurrunt, ſe implicare ſolet, ita mulieres ex picâ laborantes varia edulia appetunt, atque ea contraria, quæ tùm voluptatem, tùm inſuavitatem guſtanti exhibent. *Aëtius*, Med. Contract. *Tetrab.* 4. *Serm.* 4. *cap.* 10.

[2] Pliny, who wrote in Latin, calls this depraved taſte in one place *gravidarum malaciam*. Hiſt. Nat. *Lib. xxiii. cap.* 6. and in another place, *malaciam ſtomachi*. Hiſt. Nat. *Lib. xxviii. cap.* 7.

The

The pulſe is generally quick, frequent, and almoſt feveriſh; but low: the reſpiration ſhort, difficult, and laborious. The difficulty of breathing increaſes, even to oppreſſion, and the motion of the heart becomes ſtrong, and hurried even to palpitation, on the patients uſing the leaſt exerciſe, eſpecially if they go up ſtairs, or are forced to walk a little faſter than common. The beatings of the carotid and temporal arteries are then extremely viſible; and *paroxyſms* of the headach, which is almoſt conſtant, come on.

The patients have an involuntary propenſity to ſleep, from which it is difficult to recall them; an extreme indolence which retains them in the ſame place; a continual wearineſs with which they feel themſelves overpowered, even without doing any thing; and a profound melancholy, which renders them inattentive to every thing, and makes them ſhun all company.

The feet, and even the legs, tumefy, and are puffed in the evening, but go down again in the night; when the ſwelling is removed to the head; and more particularly the eyelids, and the whole of the eyes, round which there is a livid circle.

Moreover, the colour of the face fades; and the freſhneſs of the ſkin goes off. The patients become pale, of a leaden hue, with a colour like wax or tallow, and ſometimes even of a yellow brown, or of a yellow, verging towards green or black.

Such is the green-ſickneſs: or, to employ a term of art eſtabliſhed by uſe, ſuch is the *chloroſis*. As this diſeaſe is common at this time in Europe, and indeed very much ſo in the ſouthern parts of it, there is reaſon to believe it could not be formerly rare in Greece and Italy. Nevertheleſs it is only ſlightly touched on by [1] Hippocrates, [2] Galen, and [3] other antient phyſicians: who regarding it only as a ſimple ſymptom of ſuppreſſion, or retardation of the

[1] Lib. de Morbis Virginum.
[2] De cauſis ſymptom. *Lib. i. cap.* 7.
[3] Paulus Ægineta, *De Re Medicâ*, Lib. i. cap. 1. Aëtius, *Contract. Medicin. Tetrab. iii. Serm.* 1. *cap.* 23. Et *Tetrab. iv. Serm.* 4. *cap.* 10.

menſes,

menſes, ſeem not to have condeſcended, to give it a particular name. For it is an error to believe, that Hippocrates [1] called it *chloroſis*: this word not being even found in any of his works [2]. It is ſcarcely more than two hundred years, ſince phyſicians have begun to reckon it as a particular ſpecies of diſeaſe, among thoſe of women. The diverſity of names, which they have given it, prove ſufficiently, there was none appropriated to it in their time. Some called it the diſeaſe of young girls, *morbus virgineus*; becauſe, as we have mentioned, it happens often to young girls at the firſt eruption of their *menſes*: others, the white fever, or the pale fever, *febris alba*, or *febris pallida*, on account of the quickneſs of the pulſe; which, in this diſeaſe, is almoſt as great as in a ſlow fever; and from the paleneſs of the face, that is eſſential to it: others, the amorous fever, *febris amatoria*; becauſe this kind of fever happens to girls at the time they firſt begin to have ſentiments of love: or becauſe, as they pretend, the girls, that are attacked with it, are generally of an amorous conſtitution: but, at laſt, it ſeems a fixed matter, at leaſt in France, to call it only by the name of *pales couleurs* (AND IN ENGLAND, GREEN-SICKNESS) *pallidi* or *fœdi colores*; becauſe, the paleneſs of the face is the moſt common; or, even if you will, the moſt eſſential ſymptom of it. It is, for the ſame reaſon, that almoſt all the modern phyſicians, who have written in Latin, ſpeak of it under the name of [3] *chloroſis*; which is derived

[1] This error is found in Varandé, *Libro i. de Morb. Mulierum, cap.* 1. in Sennert, *De Morb. Mulier. Part. ii. Sect.* 3. *cap.* 2. in Riviere, *Praxeos Medic. Lib. xv. cap. i.*

[2] John Languis was the firſt who wrote with any exactneſs on this diſeaſe, in the year 1550. See his *Epiſtol. Medic. Lib. i. Epiſtol.* 21.

[3] The word χλώρωσις, a *green colour*, is formed on the model of the words μετεμψύχωσις, *traductio animæ*, and μεταμόρφωσις, *transformatio*; but becauſe the formation of this word χλώρωσις was irregular, as that of the two others, it was neceſſary that there ſhould be in Greek a verb, χλώρω, ῶ, *viridem reddo*, from whence χλώρωσις might come, as there were in Greek the verbs, μετεμψύχω, ῶ, *animam traduco*, and μεταμόρφω, ῶ, *transformatio*; from whence they might have formed μετεμψύχωσις and μεταμόρφωσις.

from

from the Greek, and ſignifies a diſeaſe where the face is pale, inclining to green. But it is a new word abſolutely unknown to antient authors; and it has not even been formed according to the exact rules of the analogy of the Greek language.

§. II. CAUSES.

A little reflection on the conformation of the ſkin, and the diſtribution of the veſſels which ſupply it with blood, will make it eaſily comprehended, that the hue and freſhneſs of the ſkin depend on three cauſes: 1°. On the fineneſs, and tranſparency of the cuticle, and of the body of the *corpus reticulare*; 2°. On the number and the ſmallneſs of the capillary veſſels, which are diſtributed on the ſurface of the ſkin: 3°. And on the quantity of blood, and the brightneſs of the red colour of it.

Thus, by the reverſe of theſe reaſons, the loſs of the hue, or the paleneſs of the face, may come from ſeveral oppoſite cauſes, 1°. From that the *epidermis* is thick, callous, opake, as when ſun-burnt or changed, or in all other caſes where the *epidermis* is thickned or parched: 2°. From that the *corpus reticulare*, which is below it, is tinged with ſome ſtrange colour, which diminiſhes the tranſparency of it; as in the different kinds of jaundice: 3°. From that one part of the capillary veſſels of the ſkin are deſtroyed; as in old age: 4°. From that the blood fails to fill the veſſels, as in faintings, waſtings, hæmorrhages, long diſeaſes, &c: 5°. And, finally, from that the blood, which fills them, is ſcarcely red at all, or much leſs ſo than it ought to be.

It is evident, that none of the four firſt cauſes can have place in women, and yet leſs in young girls; except thoſe who have a *chloroſis*, in conſequence of the ſuppreſſion, or the retardation, of the *menſes*. There can be no thickning, nor opacity of the *epidermis*; no faulty tinge in the *corpus reticuloſum*; no change in the number and thinneſs of the veſſels of the ſkin; nor any diminution in the quantity of the blood. The paleneſs,

paleneſs, which happens at that time, can only be deduced from the laſt of theſe cauſes which have been mentioned; that is to ſay, from that the blood is not ſo red as it uſually is: which occaſions, every thing elſe remaining the ſame, that it does not now communicate to the ſkin the ſame brightneſs or hue.

In order to judge of the cauſes, which may thus alter the natural colour of the blood, it is requiſite to examine all the parts which conſtitute it; to diſcover what they are, which gives it the red colour; and to determine afterwards, what are the particular faults by which theſe parts may be depraved. But let us ſee, what that *analyſis* of the blood, which is the moſt ſimple and eaſy, and conſequently the moſt faithful and certain, ſhews us on this head. 1°. The blood received, in a veſſel, from the veins, ſeparates at firſt of itſelf, on becoming cold, into two parts: the one of which grows thick, and forms a red *coagulum*, conſiderably firm in its conſiſtence: the other, which remains fluid, is a kind of yellowiſh *ſerum*, that ſurrounds, and floats upon the *coagulum*. 2°. If the *coagulum* be cut into ſlices, when it is thoroughly cold; and theſe ſlices are waſhed in water, a little warm; the red colour is immediately ſeparated from them; and they become clear and tranſparent, as a jelly: and the red colour, which the water has taken away, precipitates preſently to the bottom, under the form of a dark red powder. 3°. Moreover, if the yellowiſh *ſerum* be expoſed to a degree of heat, capable of hardening an egg, one part will concrete in form of the white of eggs; and the other preſerving its fluidity, becomes a little more yellow, and ſaltiſh; and, conſequently, intirely like to urine.

This *analyſis* proves, that only four kinds of ſubſtances, muſt be admitted to be in the blood. 1°. A *gelatinous groſs ſubſtance*, or *thick lymph*; which grows ſtiff; and concretes by the cold alone. 2°. A *red ſubſtance*; which remains commixt with the gelatinous ſubſtance in the *coagulum*, that it forms in concreting

concreting by cold; but which, warm water again ſeparates from it. 3°. Another, more fine, *gelatinous ſubſtance*; or a *thin lymph*; which grows hard only by the heat of the fire, carried to a certain degree. 4°. Laſtly, an *urinous* and *ſaline* fluid, which ſeems to be the vehicle of the three other ſubſtances of the blood; or, at leaſt, of the two firſt.

As, of theſe four ſubſtances, there is only the ſecond, that is red; the three others, being tranſparent, or ſlightly tinged with yellow; it is to the ſecond alone, muſt be attributed the red colour with which the blood appears to be ſtrongly impregnated. It might be preſumed on this account, that the quantity of the red ſubſtance muſt be very conſiderable, to have the power of communicating, to the whole maſs of blood, ſo uniform and lively a red colour. But authentic accounts, which may be ſeen in the *Acta Eruditorum Lipſienſia* of the year 1682, for the month of April; and which are eaſily verified; ſhow, that this red ſubſtance makes only the tenth or twelfth part of the whole maſs of blood, in the natural ſtate: and perhaps even not ſo much, if it be accurately eſtimated.

What has been here advanced, is confirmed by the diſcoveries of Leuvenhoeck. This obſervator has, by the help of microſcopes, diſtinguiſhed the two different ſubſtances in the blood: the one colourleſs and tranſparent, which makes the greateſt part: and the other red, diſperſed in ſpecks, that float in the colourleſs tranſparent part. Theſe ſpecks, well obſerved, are ſo many ſmall globules: which, notwithſtanding their ſmallneſs, are each compoſed of ſix other ſmaller globules. It is eaſy to conceive, that it is theſe, which give the red colour to the blood: that the white or tranſparent fluid, in which they ſwim, contains the three other ſubſtances, found in the blood by the preceding *analyſis*: and that, in proportion to this fluid, the quantity of the red globules is very ſmall; but ſufficient, nevertheleſs, to give an uniform red colour to the whole maſs, which conſtitutes the blood.

It reſults, therefore, as well from the *analyſis* that has been deſcribed, as from Leuvenhoeck's obſervations, that the colour of the blood muſt be red; and of a more lively hue, in proportion as it contains more globules: as thoſe globules are more equally diſperſed, more ſeparated, and conſequently, if I may uſe the expreſſion, more multiplied; and, let us add, as they have a more quick rotation; as the parts of which they are formed whirl more rapidly; and, laſtly, as their ſurface is more perfectly modified, in a manner proper to produce the red colour. From whence may be inferred, by the reverſe of theſe reaſons, that the blood will be leſs red; or, what comes to the ſame, that it will be more pale; in proportion as it contains more globules; and as thoſe it does contain are leſs divided, and leſs agitated; as they rotate more ſlowly; as the parts which compoſe them whirl more weakly; or as the ſurface of the globules may be leſs perfectly modified, in the manner proper to excite the ſenſation of red.

It is requiſite, that ſome of theſe five cauſes, or perhaps ſeveral of them, ſhould take place in the *chloroſis*; where, as we have already ſhewn, the blood is leſs red than it ſhould be. It may not be ſo proper however to inſert the three laſt, which are leſs known; and perhaps leſs certain: but we ſhould reſt ſatisfied with examining the two firſt, which are real. But in order to judge of theſe two cauſes; and to diſtinguiſh what may diminiſh the number of red globules in the blood; or decreaſe the motion that agitates, and ſeparates them; we muſt go yet farther; and ſhew in what manner theſe globules are formed.

The food, which is the firſt matter of the blood, is diſſolved and digeſted in the ſtomach, by the action of the *ſaliva* and of the *ſtomachal* lymph, with which it is impregnated, aided by the motion of the ſtomach: and it is there converted at laſt to a thick maſs of a grey colour, and inclining to be ſour, or at leaſt eaſily growing ſo, known under the name of *chymus*.

This mass being carried into the smaller intestines, and mixt with the bile and the pancreatic juice, undergoes again there a fresh alteration; which brings it to a right state for furnishing the lacteal veins with the chyle; that is to say, a fluid more fine, sweet, white, and milky. This chyle is again rendered more perfect in the *pancreas* of Asellius, the *receptaculum* of Pecquet, and the thoracic duct, by the admixture of lymph; which makes it more liquid and sweet: and it is, at length, in this state, and after having undergone all these preparatory changes, incorporated, in the left subclavian vein, with the blood; of which, it gradually acquires the nature and properties.

There is distinguished, even in the chyle taken from the lacteal veins, and viewed with a microscope, some globules resembling much to those in the blood; but larger, less spherical, and uniform; and of which the surface must be differently modified, as they are white, and those of the blood red. In proportion as the chyle grows perfect, and assimilates, these globules become more in number, less in magnitude, and more spherical: but they do not approach yet to those of the blood, either in quantity, smallness, or roundness. They never acquire these qualities, but by mixing perfectly with the blood: and it is only by acquiring them that they become red, or absolutely the same with those of the blood: which effects the change of chyle into blood; or sanguification.

This theory shews, that the number and the smallness of the globules of blood, depend on three causes. On the state of the chyle alone, of which they are formed; on the state of the blood which must form them; and on the state both of the chyle and the blood; that is to say, both of the matter of the globules, and the efficient cause.

1°. If digestion be well performed in the stomach; and the chyle be perfect in all its qualities; there will be more globules in it: and such as are in it will be more

more ſmall and round: and, conſequently, every thing elſe being the ſame with reſpect to the blood, there will be formed, from this chyle, more red globules, and ſuch as are ſmaller and rounder; and, therefore, of a more lively red. If, on the contrary, the chyle be of a bad quality, through the fault of digeſtion, there will be fewer globules formed; and thoſe will be larger, leſs round, and leſs red.

2°. If the blood circulate with its common velocity; be triturated as it ought to be, by the contraction of the heart, and the arteries; and have, in itſelf, the fermentative motion that is natural; every thing elſe being ſuppoſed equal with relation to the chyle; the chylous globules will, on one hand, be more attenuated, and divided; and conſequently more numerous; and, on the other, they will be more triturated, and, made more round; and conſequently more red. On the contrary, they will remain larger, leſs numerous, and be made more round; if the blood be, in the circumſtances, intirely oppoſite.

3°. If the chyle be of good quality, and the blood itſelf be in the ſtate it ought to be; the globules will be ſo much the better broken; more numerous; of a greater ſoundneſs, and more red, by the concurrence of theſe two cauſes. But conſequently, from the reverſe of theſe reaſons, they would be in the ſame proportion, as much leſs broken, numerous, round, and red, if the chyle and the blood were both at the ſame time of equal bad quality.

There are ſeveral cauſes, which may either alter the quality of the chyle, or decreaſe the motion of the blood; or, what is worſe, alter the quality of the chyle, and decreaſe the motion of the blood, both at the ſame time: and it is not extraordinary, therefore, that the paleneſs of the face, which depends on the defect of the globules in the blood, ſhould be a common ſymptom in ſo many diſeaſes. We ſhall not

undertake to inveſtigate theſe cauſes in the whole extent of them; as no paleneſs is in queſtion here, but that which comes from the retardation, ſuppreſſion, or retention of the *menſes*. For this is the only one, that is known under the name of *chloroſis*, or the green-ſickneſs; and to the cauſes, which produce it in ſuch caſes, we ſhall, therefore, limit our inquiry. But the queſtion reduced to this ſtate is eaſily reſolved.

1°. On one hand, it has been ſhewn above, *Chapter III*, that the retardation of the eruption of the *menſes* in young girls, depraves the power of the digeſtive ferments, and ſpoils digeſtion: that the ſame thing happens, when the *menſes* are ſuppreſt, or diminiſhed, *Chapter IV*; and when they are retained, *Chapter V*. Paleneſs muſt, therefore, reſult, in theſe three different caſes, from the faultineſs of the chyle, which is furniſhed to the blood; even if there was no other cauſe.

2°. On the other ſide, it has been ſhewn, *Chapter III*; that, in the retardation of the eruption of the *menſes*, the blood circulates more ſlowly, and is leſs triturated by the heart and the arteries, in conſequence of the *plethora*, which this retardation cauſes; and that the ſame thing happens, likewiſe, when they are ſuppreſt, or diminiſhed, *Chapter IV*; or when they are obſtructed, and retained, *Chapter V*. The paleneſs muſt, therefore, be owing in theſe different caſes only to the faultineſs of the blood with which the chyle is mixt, when there is no other cauſe but that.

3°. In the three caſes however of retardation, ſuppreſſion, and retention of the *menſes*, the faultineſs of the chyle always concurs, as has been ſhewn, with thoſe of the blood. The paleneſs muſt, therefore, happen in theſe three caſes, from the concurrence of theſe two conjoint cauſes: and, in a degree, conſequently, as much more great; as it muſt always be in a compound *ratio* of the two cauſes which then concur.

It is evident, therefore, that, in theſe three caſes, the ſkin of all the body, and particularly that of the face,

face, which is the fineſt and moſt tranſparent, will have ſcarcely any other colour, than that of the three other ſubſtances of the blood, which then predominate; that is to ſay, of the two kinds of lymph and *ſerum*. But theſe ſubſtances are, from their nature, of a white, inclining to grey, aſh colour, or light yellow. The colour of the ſkin, and particularly that of the face, will be, therefore, a whitiſh grey, aſh colour, lead colour, or yellow.

But it is very uſual for theſe humours, inſtead of being pure, to be charged with a certain quantity of bile, more or leſs great, according as the liver is more or leſs obſtructed; in ſuch caſes they muſt communicate to the face a yellow colour; of which the hues may vary from that of olive, even to a deep yellow.

Laſtly, it ſometimes happens, that the bile, which ſtagnates in the blood, is of a green, and leek colour; and then the ſubſtances of the blood, which will be infected with it, muſt communicate to the face, a colour inclining to green, or ſometimes even ſo deep a green, as to appear livid or black.

§. III. SYMPTOMS.

There are few functions, but what are diſordered in the *chloroſis:* eſpecially where it is of long continuance. To eſtabliſh ſome method, therefore, in the ſpeaking particularly of ſo great a number of ſymptoms, it is neceſſary to follow the enumeration, that has been made in the deſcription of the diſeaſe, *Art. I*; and to begin, by explaining thoſe which happen in the functions of the *abdomen*, *thorax*, and head; and go on, afterwards, to thoſe which relate to the exterior parts of the body.

1°. The milky humour, intended to be evacuated by the *menſes* every month, is not evacuated in the *chloroſis*. It muſt, conſequently, by being retained in the blood, mix at length with the lymph of the ſtomach, and the *ſaliva*; and alter the quality of them: which muſt make ſuch a change in their action on the ſtomach, and the tongue, that the

common flood will either affect the organs, but weakly, so as to be insipid; or affect them disagreeably, so as to be disgustful: and from thence arises the want of appetite, and the disgust to food, that attend this disorder.

2°. The changes, which the faults of the *saliva*, and the lymph of the stomach, produce in the impressions made on the tongue and the stomach, may be such; that the patients will have not only a distaste for common food, but even an inclination for eating coals, cinders, plaister, chalk, and salt: or, for drinking vinegar, &c. Because these substances stimulate the tongue more strongly; or correct the faultiness of the *saliva*, and the lymph of the stomach, &c; and it is from this, the taste for odd things, known under the names of *pica* and *malacia*, is produced.

3°. This odd taste varies in different patients. For some love one thing, and others another; which arises either from the particular character of the faultiness communicated to the *saliva*, and the lymph of the stomach; or from the different degree, to which this faultiness attains; supposing it to be the same. These variations may, also, come from the habit the patients have gradually contracted; or from the example other girls give them; and indeed they do often come from these causes.

4°. As the *saliva*, and the leven of the stomach, are viciated in the *chlorosis*, and less powerful than in their natural state, their faultiness alone would suffice, to render the digestion difficult, even though the diet were good in other respects. But on the contrary, it is certain the diet is then very bad; since the patients refuse all wholesome food; and eat many things, that cannot be digested, or but ill, and with difficulty. It is no matter of wonder, therefore, if the concurrence of these two causes renders the digestion slow, difficult, laborious, and imperfect, in this disease.

5°. The mixt mass, which will be the product of such a digestion, must, as long as it is detained in the stomach,

ſtomach, irritate its coats, and even its ſuperior orifice; and excite pains in the ſtomach, heartburn, vomitings, hiccups, &c; and as ſoon as it paſſes into the inteſtines, it muſt cauſe in them creepings, murmurings, colics, *diarrhœas*, &c.

6°. The thickning of the blood, which precedes the *chloroſis*; the retention of the milky humour, that accompanies it; and the bad digeſtion that follows; muſt ſoon give riſe to the inſpiſſation of the different ſecretions; which muſt bring on obſtructions, in the *viſcera*, particularly in thoſe which are deſigned to ſeparate tumours naturally thick; as the liver, *pancreas*, ſpleen, the glands of the meſentery, &c.

7°. The tenſion of the *hypochondria*, which happens in the *chloroſis*, depends on ſeveral cauſes. 1°. On the tumefaction of the ſtomach, full of indigeſted food, or wind. 2°. On the tumefaction of the *colon*, by wind retained in the folds, which it makes in bending back towards the *hypochondria*. 3°. On the tumefaction of the liver, or ſpleen, which are obſtructed. 4°. On the ſympathetic contraction of the *diaphragm*, occaſioned by the pain of the ſtomach, &c.

8°. As the ſtate of the *uterus* is not the ſame in all theſe diſeaſes, ſo neither are the accidents, which happen from them. Some feel, every month, pains and throws of the colic in a very lively manner. Becauſe, in ſuch patients, every thing is prepared, each month, for menſtruation: as the vermicular veſſels are filled with the milky humour; compreſs the veins; obſtruct the blood in them; and, therefore, put the body of the *uterus* in a ſtate of tenſion, and *phlogoſis*, more or leſs painful, but always equally fruitleſs; becauſe the orifices of the veinous *appendices* refuſe to open. Theſe pains are ſeated in the middle of the hypogaſtric region, or extend towards the kidneys, the groins, the thighs, &c. according to the place, where the tumefaction, cauſed by the diſpoſition of the *menſes*, is ſeated in the *uterus*. But, on the contrary, there are other patients, who have nei-

ther tenſion, nor pain in the *uterus:* becauſe there is not any ſtrong diſpoſition to menſtruation; and therefore the circulation of blood is performed in the body of the *uterus*, with the common freedom and eaſe.

9°. On one hand, in the *chloroſis*, the quantity of blood is increaſed every day, by the ſuppreſſion, diminution, or retardation of the *menſes*; and conſequently the veſſels, eſpecially thoſe of the ſoft parts, ſuch as the lungs, muſt be intirely full. On the other hand, in the *chloroſis*, the blood is thick and glutinous; and becomes ſo more and more; becauſe it is formed of a chyle, that is always depraved; and, therefore, the blood muſt ſtagnate in the veſſels, eſpecially thoſe of the lungs; and tumefy them. Theſe two reaſons occaſion, that the *veſiculæ* of the lungs, being too much compreſſed by the veſſels which ſurround them, cannot dilate without difficulty, and therefore do but dilate in a ſmall degree; which renders reſpiration difficult, laborious, and ſhort.

10°. A neceſſary conſequence of this ſtate is, that the blood can never be wholly preſſed out from the ſubſtance of the lungs: becauſe the *veſiculæ* are not ſufficiently dilated. The blood, therefore, which remains there, and which continues to ſurcharge them, muſt excite, every inſtant, a new inſpiration: which occaſions, in theſe patients, that the reſpiration becomes more frequent, and more hurried, in proportion as it is more difficult, and ſhort.

11°. As the blood is more ſtrongly compreſt, by the muſcles, when they are thrown into contraction; and being thus expreſſed, paſſes more abundantly into the ſoft parts, ſuch as the lungs; it is evident, that, in theſe patients, when they uſe any exerciſe, the lungs will be more ſurcharged with blood: which renders reſpiration ſtill more difficult, laborious, ſhort, and hurried. This is particularly obſervable, when the patients attempt to walk a little faſter than uſual; becauſe, then, the contractions of the muſcles are more quick and frequent: or when they are obliged to aſ-

cend

cend up ſome eminence; becauſe the muſcles muſt then make greater, and more vigorous contractions.

12°. As the blood, in the *chloroſis*, does not paſs without trouble and difficulty, from the left *ventricle*, into the *aorta*; and from the right *ventricle*, into the pulmonary artery, on account of the repletion of the veſſels of the body, and particularly of thoſe of the lungs; it follows, that the ventricles can never be quite emptied: which occaſions, that their contraction, being only partial, it muſt be ſmall; and conſequently more frequent, than in the natural ſtate: and from thence it ariſes, that the pulſe, which correſponds with the contractions of the heart, is alſo, in proportion, more ſmall, and more frequent.

13°. It will be proved below, *Article* 2°, that the muſcles can only contract weakly in the *chloroſis*. The heart, therefore, that is really a muſcle, can, likewiſe, only contract itſelf weakly; which renders the pulſe more weak than in the natural ſtate; at leaſt ſo long as the patients do not move.

14°. But as ſoon as the patients uſe any exerciſe, that is a little briſk, the pulſe muſt become not only more frequent; becauſe the blood, more ſtrongly expreſſed from the muſcular parts, flows more rapidly into the ventricles of the heart, and fills them more quickly; but alſo more ſtrong, and more full; becauſe the abundance of blood, by filling the ventricles more, irritates them to more ſtrong, and greater contractions.

15°. The blood, in the *chloroſis*, muſt be determined more copiouſly, than uſual, towards the veſſels of the head; becauſe of the obſtacles, that the obſtructions of the *abdomen*, and the *uterus*, oppoſe to its circulation in theſe parts: and thence comes the diſorder of the head, that is conſtant in this diſeaſe.

16°. This diſorder of the head increaſes continually, when the patients move; becauſe, the circulation being then accelerated, by the contractions of the muſcles, which beat forwards the blood, the brain is more ſurcharged with it.

17°. For

17°. For the same reason, the carotid and temporal arteries beat more sensibly then; because the blood, which is determined more copiously into the carotids, and their ramifications, produces greater, and stronger pulsations in them.

18°. In the *chlorosis*, there is only a small proportion of animal spirits separated in the brain: as well, because the blood contains only a small quantity, on account of its being thick: as, because it supplies with difficulty the small quantity it does contain, on account of the slowness with which it circulates. From whence it follows, that the fibres of the brain must want the due tension. The spirits, moreover, which are separated, are serous: because the blood itself is so: whence the fibres of the brain must be too much mollified. These fibres being thus in the *chlorosis* constantly relaxed, and mollified; there must be, in this disease, a very great propensity to sleep: since it must be in a compound *ratio* of the relaxation, and mollifaction of the fibres.

19°. As in girls, who have the *chlorosis*, the fibres of the brain are always more lax, and soft than usual; even when they are most awake, they can never be moved but weakly, by the impression of objects. Whence it arises, that nothing affects these patients: that they are disgusted with every thing: that they seek to be alone: and that they are melancholy, inattentive, and, indeed, even stupid.

20°. The little interest, which these patients take in every thing, that affects other persons of their age, would be sufficient to render them indolent; but their indolence is greatly augmented, by the trouble that they have in moving: which depends on two causes. 1°. On the small quantity of spirits which flow through the nerves; and on the slowness they flow with; which occasions the muscles to be very weakly contracted. 2°. From the resistance, which the blood that stagnates in the muscles, opposes to the contraction of their fibres: which occasions, that this contraction is performed with difficulty, and even often with pain.

21°. In

21°. In the *chlorosis*, as the blood is scarcely more than pure lymph, it abounds in *serum*. As it is only, in a small degree, broken, and attenuated by the beating of the heart, and the arteries, the *serum* is, consequently, ill mixt with the thicker lymph: and for this reason, disposed to separate easily from it. As it stagnates in the extremities of the vessels, it consequently suffers the *serum*, it contains, to pass more copiously into the lymphatic veins. To conclude, as the *serum*, which has passed into the lymphatic veins, is only weakly pressed out again, on account of the relaxation of the parts, it consequently stagnates in them. From all these conjunct causes, it is easy to infer, that, in the *chlorosis*, all the parts must abound extremely with serous lymph, and consequently be in a disposition very near to a *leucophlegmacia*, or general tumefaction.

22°. During the day, and particularly towards the evening, this swelling shews itself in the feet, legs, and even, sometimes, thighs. 1°. Because the blood, which reascends difficultly from these parts in the day time, when an erect or sitting posture is maintained, leaves behind a greater quantity of serous lymph. 2°. Because the serous lymph that the blood leaves behind, stagnates there more obstinately from the difficulty, which it has itself to come back from thence.

23°. When the patients are laid down, during the night, this tumefaction of the inferior extremities is dispersed: because that then, in the horizontal situation in which the body is, these extremities are in the same level with the other parts; and the circulation of the blood and lymph is made there with the same facility. But then, the tumefaction renders itself sensible in the face, and particularly in the eyelids, and about the eyes; because that those parts are more lax, and have less elasticity than the others, and consequently press out the lymph more weakly.

24°. There is even ground to suspect, that this *œdema*, or tumefaction, extends to the brain, from the same reason, respecting its softness; and to this cause,

cauſe, ought to be attributed the extreme trouble the patients have in waking in the morning; the invincible propenſity to ſleep, which continues, as well when they are up, as while they keep lying; and the ſtate of ſtupidity, and lowneſs of ſpirits, in which they are for ſome time after they riſe; till the change of ſituation gives opportunity to the *œdema* of the brain to diſſipate, at leaſt, in part.

25°. It muſt not be forgotten, that there are in the *chloroſis* ſeveral ſymptoms, as want of appetite, vomiting, ſwelling of the belly, convulſive choakings, and perhaps, even in certain caſes, the liking for odd things, which appear to be hyſterical, and depend on the impreſſions that are made on the *uterus*, by the diſpoſition to menſtruation. But the entering into this detail has been avoided; becauſe it was impoſſible to render it intelligible, before an explanation had been made of the cauſes of the hyſteric paſſion; of which it is only proper to ſpeak in the *laſt Chapter of Book II.*

§. IV. DIAGNOSTIC.

I. The diagnoſtic of the diſeaſe is eaſy. For as ſoon as a girl, or a woman, is found to become pale, and loſes her colour, without any preceding diſeaſe; to fall into a diſcontented ſtate, without any apparent cauſe; to have fancies, and a liking for odd things, &c; and that it is, moreover, known, that her *menſes* are retarded, diminiſhed, ſuppreſt, or retained; it may be taken for granted, that ſhe has the *chloroſis*: and the proofs which theſe ſigns afford, will confirm it every day, by new accidents, that come on in proportion, as the retardation, diminution, ſuppreſſion, or retention, continue.

II. It ſeems not to be more difficult to diſtinguiſh the different cauſes of the diſorder, which conſtitute the kinds. If the *chloroſis* happen in young girls, who have never had the *menſes*, but who are of an age to have them, it is a retardation of their eruption, to which it muſt be attributed. If it happen to mar-

ried women, who have the due ſymptoms of being with child, the ſuppreſſion of the *menſes*, which is the conſequence of their pregnancy, ſhould be then charged with it. If it happen, moreover, to girls, who have already their *menſes*, to women who are certain of not being with child, or to widows, it can only be imputed to a ſuppreſſion, diminution, or retention of the *menſes*, produced by tne cauſes enumerated in *Chapters IV* and *V*; and proper lights may eaſily be obtained on theſe three articles, by interrogating the patient.

Unhappily, women have often ſo great an intereſt in telling falſities, that there is reaſon to miſtruſt their evidence. How many girls, and widows, who perceive themſelves pregnant, far from confeſſing it, neglect nothing to make it be believed that the illneſs, and paleneſs which appear in their face, is occaſioned only from that their *menſes* have a difficulty in coming on, or are ſuppreſt by diſeaſe. An implicit confidence muſt not be always given to what, even, thoſe women ſay, who have no intereſt in concealing the truth. Are there not inſtances of ſome, even married women, who are really ignorant of their being with child: and who, concerned at finding themſelves pale, and languiſhing, apply for medicines, in order to the recovery of their health? In all theſe caſes, it is proper, that a diſcreet phyſician, who is attentive to his own honour, and that of his profeſſion, recollect what has been ſaid on this matter, in *Chapter IV*; and that he conform to the rules, which are laid down there; and which it would conſequently be uſeleſs to repeat here.

III. With relation to the degree of the diſeaſe, there is no difficulty: the time which the diſorder continues: the quality, and the number of the accidents, which attend it: the nature and the importance of the functions which are impaired: &c. ſerve as the means of judging of it: and it is of conſequence to form a right judgment, not only on account of the prognoſtic that ſhould be made of the caſe:

caſe: but, alſo, for deciding, with reſpect to the remedies that ſhould be employed.

§. V. PROGNOSTIC.

I. The *chloroſis* is almoſt always a long and obſtinate diſeaſe: becauſe it is neceſſary, in order to cure it efficaciouſly, to procure the eruption of the *menſes* in young girls, who have never had them: or to reeſtabliſh them in thoſe girls, or women, who have had them. But it has been ſhewn, in *Chapter III* and *IV*, both are often very difficult.

II. For the moſt part, this diſeaſe is long, and obſtinate in its cure; in proportion to the time it has before continued: becauſe the duration of the diſorder has given time to the obſtacles which obſtruct the due courſe of the *menſes*, to gain ſtrength; and occaſioned the maſs of blood to be more depraved.

III. In general, a happy event may be expected, when the *menſes* begin to appear; even though they may not, at firſt, be either ſufficiently copious, duly coloured, or regularly periodical: becauſe there is room to hope, that, by continuing the ſame remedies, which have begun to bring them back, the ſucceſs may be obtained of reſtoring them intirely.

IV. Nevertheleſs, as the diſeaſe is ſubject to frequent returns, it is not well to be forward in pronouncing the cure too ſoon: as it often happens, that the diſorder begins again, when it is believed to be cured; either, becauſe the obſtacles, which retard, or ſuppreſs the *menſes*, are not intirely removed: or, becauſe they are eaſily renewed by the leaſt inſpiſſation, the blood contracts anew, from the fault of regimen; the vexation that may happen to the patient; or the cold of the ſeaſon.

V. But however difficult of cure, the *chloroſis* may be, it has the advantage of being generally without danger; at leaſt, while it is recent: becauſe then, the maſs of blood has not contracted very conſiderable viciations; the obſtructions are not yet multiplied in the *viſcera*; and there is reaſon to hope, that the obſtacles

ſtacles which obſtruct the due courſe of the *menſes*, being recent, will yield eaſily to remedies.

VI. The diſorder is not without danger, from the reverſe of theſe reaſons, when it is of long ſtanding. But, nevertheleſs, experience teaches, that even in this caſe, ſucceſs has been had in curing it very happily: provided it be not attended with any bad ſymptom; and that the patients are conformable in the uſe of remedies, and the obſervation of a regimen: which does however not always happen.

VII. The danger is greater, whenever the deſire of eating odd things is to ſuch a degree, that the patients cannot abſtain from them. In ſuch caſe, *on one hand*, ſo ſtrong a deſire evinces, that the *ſaliva*, and the lymph of the ſtomach, are very much depraved, by the mixture of the uterine milk, that ſtagnates in the blood in too great quantity, which ſuppoſes an univerſal, or almoſt univerſal, obſtruction of all the veſſels of the *uterus*; and conſequently, ſuch as is difficult to be removed. *On the other hand*, the odd things, the patients cannot refrain from eating, ſupply continually a groſs chyle; which, by augmenting daily the inſpiſſation of the blood, augments in proportion the obſtructions of the *uterus*, and even produces others in the greateſt part of the reſt of the *viſcera*.

VIII. The danger becomes very great, and very momentous, when the *chloroſis* brings on conſiderable obſtructions; or, what is ſtill worſe, ſchirrous tumours in the *uterus*, or in the other *viſcera*; tubercles in the lungs, &c: or that it is attended with ſpittings or vomitings of blood, &c; *leucophlegmatia*, or univerſal tumefaction; dropſy of the *abdomen*, or of the *uterus*; obſtinate intermittent, ſlow, or hectic, fevers, &c.

IX. Finally, when the girls have a long time had the *chloroſis*, they are either barren, or but little fitted to conceive ſucceſsfully; to bear children to the time; or to have ſuch as are healthful and vigorous; which muſt be attributed to the obſtruction, that ſubſiſts in the *uterus*, and is detrimental to conception;

as will be ſhewn in *Chapter III*, where the diſeaſes, that relate to theſe functions, will be treated of.

X. The *chloroſis*, which comes on in the beginning of pregnancy, muſt be an exception, on all accounts, from the common rule: as it is void of danger, and goes away of itſelf, without returning, towards the third or fourth month: becauſe that then the *fœtus*, which is become larger, and has need of more nouriſhment, conſumes all the milky humour, and blood; which before made the repletion in the veſſels.

§. VI. *Method of cure.*

There are three kinds of *chloroſis:* that which comes from pregnancy: that which happens in girls, in whom the firſt eruption of the *menſes* is too ſlow, or laborious: and that which comes on in girls and women, in whom the *menſes* are ſuppreſt, or conſiderably diminiſhed.

I. The firſt kind requires no remedies: becauſe it cures itſelf, as has been remarked, towards the third or fourth month of pregnancy. It would even be imprudent to attempt to cure it: becauſe that would be endeavouring to bring back the *menſes*; or, in other words, to procure infallibly a miſcarriage; if there ſhould be the ill fortune to ſucceed. The beſt way is to omit doing any thing, in a diſorder, that ſhould be regarded as a neceſſary ſymptom of pregnancy; and of which the conſequences are never bad: or, at moſt, only the mitigation of it, by palliative remedies, ſhould be attempted; if it become too troubleſome.

In order to this, 1°. the patient muſt be exhorted to obſerve the beſt regimen, which the diſguſt they have to wholeſome food will permit them. It is, nevertheleſs, proper to take care, not to conſtrain them too much, in their fancies; nor to perſiſt too obſtinately in refuſing them, the odd things, they like to eat. It is ſufficient to make a proper repreſentation of the matter to them: and, after that, to

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give way to their inclination, when it is perceived, they have not the power to repress it themselves. Experience has taught, that, in reality, there is less to be feared from the indulgence given them, than from the refusal of letting them satisfy themselves.

2°. It is commonly sufficient, in this case, to help digestion, and to comfort the stomach, by the use of some proper stomachics; but such as are gentle, and taken moderately: with relation to which, the taste of the patients, and the caprice of their stomachs, must be consulted. The most used and approved are the extract of juniper; *confectio-hyacynthi*; *confectio-alkermes*; *theriaca*; opiate *Salomonis*; rhubarb in powder; bark in powder, or tincture; red coral; crabs-eyes; powder of oyster-shells; *elixir proprietatis*; *garus*; quintessence of wormwood; *l'eau des Carmes*, &c.

3°. It is important, at the same time, to keep the belly free by mollifying glysters; in case it be not so naturally: in order to empty the stomach, consequentially, by emptying the other intestines. Besides, there would be sometimes reason to fear, that the ill digested *magma* of the odd things eaten by the pregnant women, might stop in the bowels; and, by drying there, form in such hard masses of excrement, as to render it necessary, in order to expel them, to make straining efforts capable of causing a miscarriage.

4°. These reasons may even sometimes render glysters insufficient; and make it necessary to employ, also, from time to time, gentle purgatives, to cleanse the stomach more efficaciously: such as rhubarb, manna, or the vegetable salt, either alone or mixt together; or the pulp of *cassia* in whey well clarified; or in an infusion of linseed.

5°. It may be judged, that there is no great foundation for alarm, in seeing the women with child vomit often, during the first months of pregnancy. On the contrary, this evacuation is almost always salutary: because it serves to cleanse the stomach

from the foulneſſes, of which it is full. It muſt be allowed, that frequent vomits weaken, and even intercept a part of the nouriſhment of the child, and the mother; but it is better, they ſhould receive leſs nouriſhment for ſome months, than be both overloaded with ſuch as is bad.

6°. It is proper, nevertheleſs, to take care to moderate the vomitings, if they become too violent, or obſtinate. In order to which, at a diſtance from the meals, after the ſtomach has been emptied by the vomiting, and waſhed by ſome glaſſes of ptiſan, or ſome diſhes of ſmall tea, there may be given ten grains of *theriaca*, or a grain of the pills of hounds tongue, or of Starkey's, from three hours to three hours, till the heavings intirely ceaſe.

7°. This method ſhould be conſtantly perſued in the beginning of pregnancies, even the moſt laborious; and it ſhould be waited for without impatience, that the accidents begin to diminiſh in the third month, and ceaſe intirely in the fourth. For then, as the child is become ſtronger, and has need of more plentiful nouriſhment, the longings ceaſe; the appetite returns; digeſtion is reſtored; and the face regains its former colour.

II. For the two other kinds of *chloroſis*, as it is the retardation, or the ſuppreſſion of the *menſes*, which cauſe them, there is no other way to remedy them efficaciouſly, than by procuring the eruption of the too ſlow *menſes*; or reſtoring the courſe of thoſe that are ſuppreſt. It appears from hence, that the method of cure of the *chloroſis* does not differ from that of the retarded, or ſuppreſſed *menſes*; of which the *chloroſis* is only the ſymptom. *Chapter IV.* may therefore be conſulted for the treatment of this diſeaſe, where will be found, diſplayed at large, all the methods of remedying the ſuppreſſions of the *menſes*. And it will then remain only to make choice among the remedies found there, of thoſe which may be thought moſt proper for the particular caſes, that may occur; and to proportion them to the age, ſtrength, and conſtitution

tion of each particular patient; but all the precautions recommended in this *Chapter*, *Article III*, ſhould be well weighed, before any determination be made: becauſe they are all of importance; and do not leſs hold good, in the treatment of the *chloroſis*, than in that of the ſuppreſſion of the *menſes*.

But beſides this method of cure, which may be called the *radical*, there is another, which tends only to diminiſh or prevent the progreſs of the diſorder; and ſhould be regarded meerly as *palliative*, though an explanation of it is neceſſary here. The firſt method of cure is not equally proper in all ſeaſons; and often, even in the temperate ſeaſons which are moſt ſuitable to it, a ſucceſs ſo quick and perfect as is requiſite for the intire cure of the diſeaſe, does not always follow. In theſe caſes, there is conſequently a neceſſity to have recourſe for mitigation, to the ſecond kind of curative treatment; which in fact does not differ abſolutely and eſſentially from the firſt: but yet in ſuch a degree, nevertheleſs, as to merit a particular explanation.

1°. It is proper to preſcribe to the patients, a right manner of living; to let them have no food, but ſuch as affords good juices, and is eaſy of digeſtion: to deny them abſolutely the odd things for which they have a liking; and which contribute to keep up, and even increaſe the diſeaſe: and to be ſtrict with reſpect to this article; becauſe it may be done without danger in the caſe of thoſe, who are not with child: to habituate them to drink wine and water at their meals; and even ſometimes, after dinner, a little pure wine, either alone, or mixt with a ſmall quantity of ſugar; and a little muſk in powder; to force them to riſe early in the morning; and drag them out of bed, in ſpite of their reluctance, particularly in fine weather; to hinder their abandoning themſelves to melancholy; and oblige them to ſee company, and give way to amuſement: and to make them uſe ſome exerciſe, or walk in the morning, faſting; ſlowly at firſt, but faſter by degrees, in proportion as they become habituated to it.

2°. If it be obſerved, that the patients are either extremely ſhort breathed; ſubject to great palpitations of the heart; or afflicted with a conſtant headach; it is proper to bleed them from time to time, in ſmall quantities; particularly if the pulſe be full; and that it be in the ſpring, or the ſummer. Theſe bleedings may be in the arm, when there is not any appearance of the *menſes*. They may be, however, alſo in the foot in this caſe; but it is indiſpenſible to have them always there, whenever the *menſes* appear, or ſeem diſpoſed to do ſo.

3°. In order to avoid bleeding repeatedly too often, it is ſufficient, in the caſes juſt mentioned, to hold the feet in warm water for an hour or two; care being taken to keep it of a proper degree of heat. This practice attracts the blood downwards; and relieves the head, breaſt, and heart, almoſt half as much as a bleeding.

4°. If the patients have their feet ſwelled, there may be uſed, in the place of common water, a decoction of aromatic plants, as roſemary, thyme, ſage, mother of thyme, marjoram, &c; or there may be even added, a pint or two of wine; or a glaſs of *aquæ vitæ*, which renders the remedy proper for two purpoſes; to reſolve the *œdema*, by the ſpirituous parts; and to relieve the head, and lungs, by attracting the blood downwards by the heat.

5°. Whatever precautions may be taken with reſpect to *regimen*, the errors the patients fall into, or the bad diſpoſition of their ſtomach, always produce crudities and viſcidities, that ſpoil digeſtion more and more, which muſt create a neceſſity of giving purges from time to time. If they be lean, dry, threatned with a ſlow fever, or conſumption, ſuch medicines only, ſhould be employed, as are compoſed of rhubarb; the vegetable ſalt; *ſal polychreſt*; manna; *caſſia*; ſyrup of apples; ſyrup of peach-flowers, &c. But if the patient be of a phlegmatic habit, or threatned with œdematous tumefaction of the extremities, uſe ſhould be made of infuſion of the follicles of ſena, in which is diſſolved an ounce, or half

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an ounce of manna; or *diagrydium*, the *pulvis Cornachinus*, aloes, jalap, turbith, &c. in powder, ſhould be preſcribed in the form of boluſſes.

6°. To enforce the effect of the purgatives, frequent uſe ſhould be made of ſtomachics; which, by reſtoring a due digeſtion, render more laudable the chyle which muſt paſs into the blood. An enumeration will be given here of the ſtomachics, the moſt approved on theſe occaſions; amongſt which, a ſelection may be made of thoſe that are thought moſt proper, according to each degree of the diſorder, or the conſtitution of the patients.

AROMATICS.

Cinnamon;
Caſſia lignea, or white cinnamon;
Cloves;
Mace;
Nutmeg;
Cardamums;

They may be uſed in powder, mixt with the victuals, in ſmall quantities: or prepared in medicinal wines, of which ſome ſpoonfuls may be given morning, and evening.

Oriental Saffron;

It may be ordered in powder, in the doſe of, from ten to twenty grains; or a little pinch may be infuſed in two diſhes of tea; and taken faſting.

SEEDS.

Coriander ſeed;
Juniper berries;

They may be uſed in the form of decoction, ptiſan, or tea.

ELECTARIES, AND CONFECTIONS.

Theriaca;
Alkermes;
Confectio-hyacinthi;
Opiate *Salomonis*;
Extract of juniper;

In the doſe of, from twenty grains to half a dram, or two ſcruples, in the morning faſting, in a ſpoonful of wine.

ELIXIRS, DISTILLED WATERS, OR STOMACHIC PREPARATIONS.

Elixir proprietatis without acid;
Quinteſſence of wormwood;
Eau de Méliſſe, ou des Carmes;
— In the doſe of, from eight drops to fifteen, or twenty, in a ſpoonful of wine, faſting.

Mint water; — In the doſe of one, or two ſpoonfuls.

Elixir proprietatis diſtilled, or *garus*; — In the doſe of a tea-ſpoonful, in double the quantity of water, or wine.

Decoction of wormwood; — In the doſe of a glaſs of ſix or ſeven ounces.

Wormwood wine; — In the doſe of half a glaſs of three, or four ounces.

Syrup of wormwood; in the doſe of one ounce.

GUMS, OR RESINS.

Maſtic;
Myrrh; — In the doſe of, from ten to fifteen grains, in powder, or in a bolus.

7°. To the uſe of ſtomachics ſhould be joined, that of gentle aperitives; on which may be conſulted, *Chapter IV*; ſuch being choſen, which are believed to be moſt efficacious. In general, iron, and ſteel, furniſh thoſe, which are moſt commonly employed, As,

Filings of iron, or ſteel porphyriſed; — In the doſe of, from ten to eighteen, or twenty grains, faſting, with a little of the *confectio-hyacinthi*: or at dinner, with as much rhubarb.

Aperitive

Aperitive saffron of Mars prepared with the dew of the month of May;	In an opiate; or, as the filings, in the dose of, from fifteen to twenty grains.
Saffron of Mars prepared with the simple heat of warm water; and therefore called *Æthiops Martis*;	In the dose of, from fifteen to twenty grains.
Martial soluble tartar; Riviere's salt of steel;	In a bolus, or dissolved in some ptisan, or some broth, in the dose of, from eighteen to twenty grains.
Tincture of steel;	In the dose of, from twenty to thirty drops, in broth, or in a glass of ptisan.
The ball of Mars;	Dipt in aperitive broth, or in a glass of ptisan till they become black.
Chalybeated white wine; that is to say, filings of steel, or the aperitive saffron of Mars infused in wine;	In the dose of a glass of three or four ounces, in the morning fasting.
Chalybeated water, made by infusing, in water, saffron of Mars, old rusty iron, iron nails, or tacks;	As a common drink mixt with wine.

8°. The stomachics may be conjoined with aperitives, and compounded, by combining them in proper doses in infusions, decoctions, apozems, powders,

boluſſes, opiates, &c. With relation to which may be conſulted, what has been before ſaid in *Chapter IV.* In this caſe, the drugs muſt be ſelected properly for the form of the medicine, that it is thought fit to preſcribe.

9°. As the thermal waters, taken internally, unite all the advantages of purgatives, ſtomachics, and aperitives, they are very efficacious for the cure of the *chloroſis*; and they may be taken in the proper ſeaſon; that is to ſay, the ſpring and autumn; and a conſiderable long courſe of them may be continued in moderate quantities, provided the bad ſtate of the breaſt do not forbid the uſe of them. A preference may be given to thoſe of Vichi, Plombieres, Balaruc, Bareges, Bagneres, &c.

The mineral chalybeate waters, that ſtrike a black colour, on being mixt with the decoction of galls, are uſeful, alſo, for the cure of the *chloroſis:* at leaſt by the parts of iron they contain. They may, therefore, be employed with ſucceſs during ſummer; and be taken, for ſome days together, in a moderate quantity, provided care be taken to add, from time to time, a ſufficient proportion of the *ſal polychreſt* of Seignette; or of *ſal de duobus*; to hinder them from ſtaying in the body. The waters of this kind, the moſt recommended, are thoſe of Vals, Caranſac, Spa, Buſſan, and Forges. But it is of conſequence to obſerve, that the uſe of theſe waters muſt be prohibited, not only when the *thorax* is in danger, in the ſame manner as the thermal waters: but, alſo, when there is a great tumefaction of the inferior extremities, which gives room to apprehend an *anaſarca*, or *leucophlegmatia.*

10°. The remedy, which may be moſt commonly uſed, is the following powder: which effects, at the ſame time, all the principal intentions.

℞. *Limatur. Chalib. in aquâ præparat.*
Cinnam. pulverati, āā *part. j.*
Sacchari tenuiſſimè triti, part. ij.
M. F. pulvis, cujus doſis à ʒß *ad* ʒj.

This powder may be given, morning and evening; and there may be taken after it, one or two diſhes of a ſlight decoction of aperitive plants; or, even an aperitive broth. It may be, alſo, given immediately before dinner.

When the patients have a coſtiveneſs, this purgative powder may be given twice every week, adding ſome grains of rhubarb in powder; or of the *pulvis Cornachinus*. The rhubarb ſhould be employed, when there is any ground of apprehenſion for the breaſt; but the *pulvis Cornachinus*, or any other hydragogue, ſhould be preferred, when the *œdema* of the inferior extremities increaſes.

11°. If we might believe certain authors, they regarded formerly, as ſpecifics, in this diſeaſe, 1°. The preſerved roots of angelica, in the doſe of half an ounce, or an ounce, in the morning faſting: or the decoction of an ounce and a half of the ſame root, unpreſerved, in two cupfuls of water: which was taken in the morning faſting. 2°. The decoction of the roots of ſcorzonera, in a like quantity of water; and the ſame doſe, taken in the ſame manner. 3°. Oriental bezoar in powder, in the doſe of, from ſix to twelve or fifteen grains, diluted in ſome ſpoonfuls of the decoction of the root of angelica, or ſcorzonera. But theſe medicines fall far ſhort of meriting the praiſes, that have been given them: and I have not found any proofs, that they have, in this reſpect, any virtues ſuperior to thoſe of the common remedies.

12°. As the worſt accident of the *chloroſis* is a conſumption, and that this is always foreſhown by a pain in the breaſt, frequent coughings, either dry or moiſt; tabidneſs; *inſomnia*; diſpoſition to a ſlow fever in the night; nocturnal ſweats; &c; it is requiſite to be attentive, to prevent it as ſoon as any of theſe ſigns of it appear. In this view, bleeding in ſmall quantities muſt be uſed from time to time; purges of manna, or *caſſia* in whey, muſt be adminiſtered; broth of chicken, lights, veal, frogs, ſnails, &c. ſhould be taken; fine oatmeal

oatmeal boiled in water with a little cinnamon and sugar; or in veal broth; should be given, morning and evening. There should be administered, also, in the evening, some slight narcotic; as the decoction of one or two heads of the white poppy; three or four drams of the syrup of *diacodium*; or four grains of the pills of hounds tongue. In order to moderate the cough, if it be troublesome, the patient should be put into a course of milk, distilled from the pectoral plants; whey clarified, in which the flowers of mullein have been infused; or goats or asses milk simply. Milk should be even given, as the whole food; provided the stomach can bear it. In the mean time, all the treatment of the *chlorosis* should be suspended; and when it is resumed, it should be with great care; softning the aperitives, that are employed, by the mixture of proper pectorals.

13°. A tumefaction almost general, or an *anasarca*, is another accident of the *chlorosis*, which is not much less common or bad. In order to prevent it; or, at all events, to cure it; it is proper to employ, 1°. Diuretic ptisans, with the decoction of China root, sarsaparilla, parsley root, *millepedes*, &c: 2°. Diuretic broths, with the roots of smallage, eryngo, and the leaves of chervil, watercresses, pimpernel, &c. 3°. Diuretic boluses, with the powder of *millepedes*; the *sal mirabilis Glauberi*; *arcanum duplicatum*; &c; incorporated with a little syrup of buckthorn; or a little Venice turpentine. Moreover, the danger of an *anasarca* does not create a necessity of discontinuing the remedies for the *chlorosis*: which, on the contrary, are themselves proper for an *anasarca*.

14°. The varying the remedies is known to be requisite in all long and difficult diseases: but this rule should be, particularly, applied to the treatment of the *chlorosis*, in which it seems the stomach is soon habituated to the action of the same remedies: and that it is proper to substitute new ones, often to reanimate it. Therefore, sometimes stomachics, sometimes

times aperitives, and sometimes both joined together, should be employed. It is proper, sometimes, to give them without purgatives; and sometimes to add such in a moderate dose; and it is expedient, on some occasions, to let the stomachics, and aperitives, be succeeded by diluents; humectants, and sweetners, when there is danger of the breast; and there should, in other cases, be substituted for them diuretics, and hydragogues; when the tumefaction of the extremities gains ground, and threatens a dropsy.

15°. Finally, marriage, when it is convenient, is an excellent remedy in this disease. It is a fact, that was known as early as the time of [1] Hippocrates; and confirmed since by a great number of observations. But it is proper to intimate, that, in order to render the effect duly certain, it is necessary to observe, on this account, the same conduct, as was before recommended with relation to exercise and walking, N° I. that is to say, it must, at first, be used moderately; and practised more frequently by degrees. It is not well, however, to be too hasty in reaping all the advantages, that can be expected from it, till the *uterus* has been gradually put in a condition to take advantage of the good effects, it may afford; that is to say, when it has been rendered susceptible of all the contractions, compressions, and systaltic oscillations, that the use of coition produces in it; which must restore the free circulation of the blood, and lymph, and the free secretion of the milky humour; and consequently re-establish all the mechanism of menstruation.

[1] *De Morbis Virginum.*

CHAP.

CHAP. IX.

Of excessive menses, *and floodings.*

§. I. DESCRIPTION.

AS the discharges of blood in women may be diminished, and even suppress, they may be, likewise, so abundant, as to weaken and exhaust the patient: and, in this case, they constitute a new kind of disease; and such as is directly opposite to that, of which we have spoken in *Chapter IV.*

This disease bears two different characters. Sometimes the discharges, though excessive, keep still an appearance of regular periods; and then the disease retains the name of *excessive menses.* Sometimes, on the contrary, the discharges do not follow any periodical order; but err only in the copiousness, or in the duration; and then the disease is known by the name of *flooding.* There are, therefore, two different kinds of this disease: which it is necessary, for the sake of order, to explain separately.

Of the excessive menses. The quantity of blood, which is evacuated by the *menses*, depends on three circumstances. On the period of the return of the *menses*; the duration of the discharge of them; and the quantity of blood, which is evacuated: from whence we have had reason to conclude in *Chapter IV*, that the *menses* may be diminished, with relation to each of these three circumstances; when the return is too rare; the discharge too short; and the quantity too little. We may, therefore, infer from it, in the same manner here, by the reverse of these reasons, that the *menses* may be excessive, with relation to each of the same circumstances; when the returns are too frequent; the discharges too long; and the quantity too great. It remains only to show, in how many manners, the irregularity of these three circumstances may be combined.

I. These

I. Theſe circumſtances may be ſeparately faulty, as to each ſingly. From whence it reſults, that the *menſes* may be exceſſive, either becauſe they return too often, endure too long, or flow too copiouſly: which conſtitutes the *firſt order* of exceſſive *menſes*.

II. Theſe circumſtances may be faulty as to two at the ſame time; and then the *menſes* are exceſſive, becauſe they return too often, and endure too long a time; endure too long a time, and are too copious; or are too copious, and return too often: which conſtitutes the *ſecond order* of the exceſſive *menſes*.

III. Theſe circumſtances may be faulty, as to all the three together; that is to ſay, the *menſes* may return too often, endure too long, and be at the ſame time too copious; which conſtitutes the *third order* of exceſſive *menſes*.

To avoid falling into a miſtake in this point, it is neceſſary to remark, that as it is impoſſible to fix the juſt proportion of the *menſes* in their natural ſtate: becauſe their return, duration, and quantity, vary in different ſubjects, according to the age, conſtitution, climate, manner of living, &c. It is impoſſible alſo to determine accurately in what caſe the *menſes* ſhould be regarded as exceſſive: becauſe that, which conſtitutes in ſome women a ſtate of diſeaſe, may conſtitute in others, a ſtate purely natural. Wherefore, it is not proper to be forward in accounting the *menſes* exceſſive, only becauſe they are more frequent, more copious, or continue longer. It is neceſſary that, beſides this, they ſhould be attended, or followed by ſymptoms, which evince a ſtate not natural; ſuch as diſguſts, paleneſs, lowneſs of ſpirits, weakneſs, œdematous tumefaction of the feet, a general decay, &c.

Of floodings. Floodings, to merit that name, muſt be very copious; or laſt long if they be moderate. When the diſcharge is copious, the flooding bears the name of *hæmorrhage* of the *uterus:* when it is moderate, but laſts a long time, it is called in Latin *ſtillicidium*,

ſtillicidium [1], or *ploratus uteri*; and may be called in Engliſh, moderate flooding, or dripping of blood from the *uterus*.

There is the leſs difficulty in deciding on floodings, than on the exceſſive *menſes*: for, without any riſk of being deceived, one may regard, as a flooding, and conſequently as a real diſeaſe, every diſcharge of blood, which is very copious; however little time it may laſt: or which is long, however moderate may be the quantity.

Moreover, the floodings, which ſometimes happen in women with child; and the *lochia*, which ſometimes become exceſſive in childbed, and miſcarriages; are, as they are properly eſteemed, true floodings, comprehended, conſequently, in the genus of the diſeaſe, we are now treating of: but as they occur in particular conjunctures, require particular remedies, and conſtitute ſpecial caſes, it does not appear proper to ſpeak of them here: and the particulars of them will be found in *Book III*: in which the *diſeaſes which regard pregnancy, or its conſequences*, will be treated of.

§. II. *Cauſes of the exceſſive* MENSES.

To explain the cauſes of the exceſſive *menſes* is, to explain thoſe of three diſeaſes: for it muſt be inquired, 1°. What makes the *menſes* return too often: 2°. What makes them continue too long: 3°. What makes them flow too copiouſly: and each of theſe reſearches demands a particular detail.

I. *Of the* MENSES, *which return too often.* A little reflection on the mechaniſm of menſtruation will make it be comprehended, that the *menſes* muſt return

[1] There are authors, who take the *ſtillicidium uteri* for a diminution of the *menſes*; but they are deceived. A continual diſcharge, which laſts for a long time, as the *ſtillicidium uteri*, muſt be conſidered as a flooding, however moderate it may be; and this is the notion which Aëtius gives us, who firſt ſpoke of it. *Tetrabibl. iv. Serm.* 4. *Cap.* 63.

oftner than is right, from three cauſes: 1°. From the faultineſs of the lactiferous veſſels of the *uterus*: which fill themſelves with the milky juice too quickly, and conſequently too often. 2°. From the faultineſs of the veinous *appendices*, which elongate, and dilate themſelves too eaſily; and conſequently too often, on account of the tumefaction of the lactiferous veſſels. 3°. From the faultineſs of the blood; which makes too ſtrong efforts on the veinous *appendices*; and conſequently forces them to open too often. Theſe three different cauſes may either act ſeparately, each in particular; or concur two, and even three together, according as it happens, that the remote cauſes, on which they depend, and which are going to be enumerated, coincide together, or otherwiſe: which renders the period of the returns of the *menſes* more or leſs ſhort.

1°. The lactiferous veſſels of the *uterus* are filled with milky juice too ſoon, and conſequently too often, when the women eat too much; particularly if they eat ſucculent food; as rich women, who lead an indolent and ſedentary life; as the greateſt part of the women who live in large towns; and as women, who giving ſuck, loſe their milk, in conſequence of ceaſing to nurſe the child, particularly if it be early, and while the milk abounds.

2°. The veinous *appendices* of the *uterus* elongate, and dilate themſelves too eaſily, and conſequently too often, on account of the tumefaction of the lactiferous veſſels; when their coats are naturally too ſoft, and lax; as in perſons of a very delicate conſtitution; when they are too much mollified by the *fluor albus*; as in women ſubject to this inconvenience: when they have been torn in violent deliveries, miſcarriages, or the extraction of the *placenta*: or when they are partly eroded by ſome ulcer in the *uterus*.

3°. The blood makes too great efforts on the veinous *appendices*, and forces them conſequently to open too often, when it is too abundant, as in a true *plethora*, which is made by too much nouriſhment, and too little

little exercise: when it is too much rarefied, as in the false *plethora*; or that it circulates with too much rapidity; which happens in women who eat food that is too acrid, spicy, succulent, and of high flavour; who drink spirituous liquors; who use violent exercise; who sit up late at nights; who have strong passions; or who are exposed, by chance, to any acute fever.

II. *Of the* MENSES *which continue too long.* The too long duration of the *menses* depends on three causes: 1°. On the faultiness of the lactiferous vessels, which remain too long a time full of milky juice. 2°. On the faultiness of the veinous *appendices*, which close themselves too slowly, and suffer, consequently, the blood to escape too long a time. 3°. On the faultiness of the blood, which passes too long a time into these *appendices*; and therefore keeps them a long time dilated. These three different causes, as we have before remarked of those of the preceding article, may either act separately, or concur together, according to the nature of the more remote causes, on which they depend; and which are going to be explained; that renders the duration of the discharge more or less long.

1°. The lactiferous vessels remain too long a time full of the milky juice; and compress, consequently, too long a time, the neighbouring veins: because their orifices are too small, through the faultiness of their natural conformation; or through their being half obstructed by remains of the *fluor albus*, which occasions, that they do not suffer the milky lymph to escape sufficiently fast; because the milky juice is very copious *(see N° I. Art. I.)*; which occasions, that they are too long full of it; and because the milky juice is too thick *(see N° I. Art. I.)*; which prevents its being discharged as freely, and as quickly, as usual.

2°. The veinous *appendices* are too long a time in closing, and shutting themselves up; because their coats have been so much dilated, *(see below, N° II. Art. III.)*: because their natural elasticity is not sufficient,

cient, *(see* N° *II. Art. I.):* or becauſe they have been torn or eroded, *(see the ſame Number, Art. I.)*

3°. The blood paſſes too long a time, into the veinous *appendices*, becauſe it abounds too much in all the veſſels of the body, in conſequence of a true or falſe *plethora*, *(see N° III. Art. I.):* becauſe it is retained in the veins of the *uterus*, too ſtrongly compreſt by the tumefaction of the lactiferous veſſels, *(see below, N° I. Art. III.):* or becauſe it paſſes into the veſſels of the *uterus*, with too much rapidity; on account of the quickneſs with which it circulates, *(see N° III. Art. I.)*

III. *Of the* MENSES *which flow too copiouſly.* The copiouſneſs of the *menſes* is owing to three cauſes: 1°. The faultineſs of the lactiferous veſſels, which, in conſequence of being too full of the milky juice, compreſs with ſo much force the veins ſurrounding them; that almoſt all the blood, which paſſes thither, is obliged to turn off into the veinous *appendices*; and to be diſcharged through them. 2°. The faultineſs of the veinous *appendices*, of which the orifices, being too large, ſuffer the blood to eſcape through a too great bore; and, conſequently, in too great quantity. 3°. The faultineſs of the blood, which flows too rapidly, and conſequently in too great quantity. Theſe three orders of cauſes may, as thoſe in the preceding articles, be combined together, or otherwiſe, according to the affinity, or non-affinity of the remote cauſes, which are going to be explained; and on which they depend; that render the diſcharge of the *menſes* more or leſs copious.

1°. The lactiferous veſſels are too full of milky juice in women, with whom, the orifices of theſe veſſels are naturally too ſtrait, or partially obſtructed, by the remains of the *fluor albus*; and thence not in a condition, to ſuffer the humour they contain, to be diſcharged into the *uterus*, *(see N° 1. Art. II.):* in whom the milky humour is very copious, and conſequently fills too much the lactiferous veſſels, *(see N° 1. Art. I.):* and in whom the milky juice is too

thick, and can ſcarcely be diſcharged into the *uterus*, (*ſee* N° 1. *Art. I.*)

2°. The orifices of the veinous *appendices* are too large in the women, with whom, the coats, which form them, are naturally too thin, or too much relaxed by the *fluor albus*, (*ſee* N° 2. *Art. I.*) : in whom, the borders of theſe orifices have been torn in hard labours, miſcarriages, or the violent extraction of the *fœtus*, or the *placenta*, (*ſee* N° 2. *Art. I.*) : or in whom, the borders have been eroded, or eaten away by ſome ulcer of the *uterus*.

3°. The blood flows too rapidly, and, conſequently, too copiouſly in the women, in whom it paſſes in too great a quantity into the veinous *appendices* of the *uterus*, (*ſee* N° 3. *Art. II.*) ; in whom it paſſes thither with too much velocity (*ſee* N° 3. *Art. II.*) ; and in whom the blood which paſſes thither is too fluid ; and conſequently too eaſily diſcharged ; as happens in all caſes of great ſolution of the blood.

IV. It ſhould be remarked in the enumeration, which has been made, that the too great frequency, duration, and copiouſneſs, of the *menſes*, which conſtitute the firſt claſs of caſes, where the *menſes* are exceſſive, depend often on the ſame cauſes ; or at leaſt on cauſes, that have much affinity. For which reaſon, there is no room to wonder, it often happens by accidental combinations, not only that the *menſes* are, at the ſame time, too frequent, and too long ; too long, and too copious ; or too copious, and too frequent : which conſtitutes the ſecond claſs of caſes, where the *menſes* are ſtill more exceſſive : but even, that they are ſometimes too frequent, copious, and long, at the ſame time ; which conſtitutes the third claſs of caſes, where the *menſes* are the moſt exceſſive. It would be uſeleſs to enter into a more particular explanation of that head, which may be eaſily ſupplied by the comparative application of what has been already ſaid.

§. III. *Cauſes*

§. III. *Causes of flooding.*

Floodings suppose always, either a too great dilatation of the veinous *appendices* of the *uterus*; or such as lasts too long a time: which occasions, that the blood is discharged in floodings, either too abundantly, when it is an *uterine hæmorrhage*, or too long a time, when it is a *dripping of the uterus*. But this dilatation of the veinous *appendices*, which is too great, or lasts too long, may be of two kinds. Either it is a simple dilatation of the orifices of the *appendices*, without injuring their continuity; or it is a dilatation, that does injure it; and, consequently, a true dilaceration, or division of the coats of the vessels. But let us examine, in particular, these two orders of causes.

I. The dilatations without injury to the continuity, or the simple dilatation of the orifices of the veinous *appendices*, proceed in floodings from the same causes, as in the excessive *menses*. For instance, very great dilatations must be always made in the orifices of the veinous *appendices*, whenever all the causes mentioned in *N°* 1. and 2. of *Art. III.* concur together; and then the blood flows very abundantly through them, while thus dilated; especially if it happen, that all the causes laid down in *N°* 3. of *Art. III.* are then conjoined together. In this case, consequently, there will be a very copious flooding, or a true *uterine hæmorrhage*, by the simple dilatations of the orifices of the veinous *appendices*, without any dilaceration: which will endure a shorter, or longer time, according to the duration of the causes, that produce the dilatation.

In the same manner a dilatation of these orifices must be made, moderate indeed, but nevertheless more long, and even also more obstinate, whenever all the causes enumerated in *N°* 1. and 2. *Art. II.* concur together: and then the blood flows in a very small quantity; but nevertheless for a long time, especially if the causes of *N°* 3. of *Art. II.* are conjoined. In this case, therefore, there will be, by the simple dilatation of the orifices of the *appendices*,

and without any dilaceration, a moderate, but long flooding; that is to say, a ſimple *ſtillicidium uteri*, or dripping of the *uterus*.

II. The dilatations with ſolutions of continuity, or dilacerations of the orifices of the veinous *appendices*, are owing to three cauſes, which it ſuffices here to point out; becauſe the particular diſcuſſion of them muſt be deferred to another occaſion.

They are, 1°. Ulcers in the cavity of the *uterus*, more or leſs large, deep, and exedent; placed at its bottom, ſides, or neck; and proceeding from ſeveral cauſes, that will be examined below, *Book II. Chapter IV.*

2°. Wounds, tears, or ſcratches; which happen within the *uterus* in hard labours, miſcarriages, and the extraction of a dead child, or an adhering *placenta*.

3°. Choppings, excoriations, or diviſions of the coats of the veſſels, cauſed in the internal ſurface of the *uterus*, by a too acrid *fluor albus*; too pungent injections; or too great diſtenſions ſuffered in a difficult labour; or by the ſtrokes of a nail given in a delivery.

4°. Aneuriſms, *varices*, and aneuriſmal, or varicous dilatations; which happen in the veſſels of the *uterus*, in conſequence of a ſudden ſuppreſſion of the *menſes*, or which ſucceed gradually to obſtructions or *ſchirruſſes* that turn the courſe of the circulation; to *funguſſes*; to rotten fleſh, which is formed in open cancers, or foul ulcers; &c.

When any of theſe ſeveral cauſes act on a veſſel of ſome magnitude, whether arterial, or veinous; and tear, or exede it, throughout its whole thickneſs; it muſt bring on a copious flooding, or *uterine hæmorrhage*, but it can only cauſe a moderate flooding, or a *dripping of the uterus*, when it only acts weakly, or in a ſmall degree, on large veſſels; or where it tends only to exede, or lacerate meer capillary veſſels, or ſuch as are not large.

III. It

III. It ſhould not be forgotten to add, to theſe internal cauſes of flooding, ſeveral others, which although external, contribute, nevertheleſs, to ſupport, augment, and even introduce floodings, whenever there is any diſpoſition to them in the *uterus*; or, in other words, any of the faultineſſes that have been enumerated, even though this diſpoſition or faultineſs ſhould be too minute of itſelf, to be alone capable of producing ſuch an effect. The ſame cauſes may, alſo, accelerate the returns of the *menſes*, by rendering the diſcharge of longer duration; or by augmenting the quantity; that is to ſay, by rendering the *menſes* exceſſive; ſuppoſing that there may be in the lactiferous veſſels, veinous *appendices*, or blood-veſſels, any of the particular diſpoſitions above explained. The following are the principal cauſes of this kind; with relation to which it ſuffices to point out the manner of their action.

1°. Exceſs of the heat of the air in ſummer; great fits, or violent *paroxyſms* of fever; ſuch as thoſe, which precede or attend the eruption of the meazles; or the eruption and ſuppuration of the ſmall-pox; frequent and exceſſive watchings; too ſtrong paſſions of the mind, ſuch as anger, &c: becauſe, in all theſe caſes, the rarefaction of the blood is increaſed; and the rapidity of the circulation accelarated: which redoubles the action of the blood on the veſſels of the *uterus*.

2°. The uſe of half baths, or baths, too hot; or the habit of warming the feet extremely; &c: becauſe the rarefaction, which the heat produces in the inferior parts of the body, augments the velocity; and, conſequently, the copiouſneſs of the blood, that circulates in them; which occaſions the veſſels of the *uterus* to be more filled with it.

3°. The ſudden action of cold on the ſtate of the body: the effect of an unexpected fright: a chilly rain, with which the body is inſtantly affected; &c: becauſe the cooling, or the ſpaſmodic conſtriction, which happens then in the ſtate of the body, forces the

blood to throw itſelf on the internal parts; and, conſequently, on the *uterus* itſelf.

4°. The too great uſe of coition; or violent exerciſe; as walking a long time, dancing much, jumping, &c: becauſe, in theſe caſes, the reiterated contractions of the muſcles agitate the blood; and augment the rapidity with which it circulates; occaſioning it to paſs into the *uterus* with greater force. Beſides the conſideration, that coition, in particular, puts the fibres of the *uterus* into briſk and tonic contractions; which turn the courſe of the circulation in it; and force the blood to burſt its own veſſels.

5°. Falls; ſhakes on horſeback; or the jumblings of a rough carriage: becauſe the concuſſions, to which the *uterus* is thence expoſed, force open the veſſels; and even, ſometimes, tear them, when they are reluctant.

6°. Violent cries; talking or reading with a loud voice; the agitations of vomiting; &c: becauſe, in theſe caſes, the muſcles of reſpiration, and conſequently of the *diaphragm*, as well as thoſe of the *abdomen*, are in briſk and reiterated contractions; which, in ſhaking, agitating, and jumbling the *uterus*, oblige the veſſels to open; and even ſometimes lacerate them.

7°. The ſtrong and continued ſtrainings in a *diarrhœa*, *teneſmus*, &c; or the efforts to liſt ſome heavy load, &c: becauſe the ſtrong and tonic contraction of the muſcles of reſpiration; and, conſequently, of the *diaphragm*, as well as of thoſe of the *abdomen*; preſs, and bear on the body of the *uterus*; and burſt the veſſels in it.

8°. Miſcarriages, hard labours, falls, blows, or ſtrains in pregnant women, which affect ever ſo little the adheſion of the *placenta* to the *uterus*, &c: becauſe, in theſe circumſtances, the veinous *appendices*, which are very much dilated on account of their bigneſs, diſcharge a large quantity of blood, as ſoon as they are opened; and muſt continue to do the ſame for a long time; from the difficulty there is of their cloſing

closing again, while the *uterus* is tumefied; and often, by the impossibility of doing it, so long as the *fœtus*, or the afterbirth, remain in the *uterus*. But these particular cases will be examined in *Book II.*

9°. Lastly, the improper use of too strong emmenagogues, too acrid pessaries; too often repeated bleedings in the foot, &c. in the suppressions of the *menses*; and, what is yet worse, in the time of their natural cessation: because the action of these remedies, by encouraging too much the eruption of the *menses* at the time when the vessels of the *uterus*, being closed, oppose it most, tend almost always to cause such lacerations of these vessels, as are bad, and frequently fatal.

§. IV. *Explanation of the differences.*

All the differences, that are remarked among floodings, arise from the different kinds of the disorder; or from the different nature of the causes, which produce them; or from the different seat, which the cause of the disorder has in the *uterus*.

I. As the differences, which depend on the different kinds of the disorder, have been already enumerated in the description, *Art. I.* it will be sufficient to mention them here.

1°. When the fluxes of blood, too copious, or too long continued, retain, in some measure, the periods of the *menses*, they are to be treated only as *excessive menses*: but when they do not retain them at all, they are to be regarded as *floodings*.

2°. The *menses* may be excessive, by the frequency of their returns; by the duration of the flux; or by the copiousness of the blood that is evacuated; which may be from one cause simply, and this is then the first class of excessive *menses*. They may be also excessive from two of these causes acting together, and it is then the second: or they may be so from the three concurrently, and it is in such case the third.

3°. Floodings are, sometimes, very abundant; and then, whether they endure a long time, or a shorter,

they are called *hæmorrhages* of the *uterus*. Sometimes, on the contrary, they are very ſlight, but laſt a long time; and then they have the name of *ſtillicidium*, or dripping of the *uterus*, given to them.

II. The differences, which ſpring from the different nature of the cauſes, merit an elucidation ſomewhat more particular.

1°. Every diſcharge of blood from the *uterus*, whatever name be given to it, of exceſſive *menſes*, or flooding, depends always either on the ſolution of the continuity of the veſſels of the *uterus*; or, ſimply, on a faulty diſpoſition, without any ſolution of continuity. *Firſt difference.*

2°. Every diſcharge, which has for its cauſe, a ſolution of continuity of the veſſels of the *uterus*, depends either on dilacerations, choppings, ulcers, or *varices* of the *uterus*. *Second difference.*

3°. Every diſcharge, which happens without ſolution of continuity, in the veſſels of the *uterus*, ſuppoſes ſome faultineſs in the lactiferous veſſels, or the veinous *appendices*; or in the quantity, or the courſe of the blood. *Third difference.*

4°. The faultineſſes of the lactiferous veſſels, which may give riſe to exceſſive *menſes*, or floodings, are confined to their natural ſmallneſs; or to the accidental obſtruction of their excretory orifices; which occaſions, that they do not ſuffer the milky juice, that paſſes into them, to flow out, or only in a little quantity; and are conſequently too often, too long, and too much full.

5°. The faultineſſes of the veinous *appendices*, which may cauſe exceſſive *menſes* or floodings, are confined to the natural ſoftneſs, or ſome accidental mollifaction of their extremities; which occaſions that they open too eaſily, remain too long in that ſtate, and undergo it too often.

6°. The faultineſſes of the blood, which brings on exceſſive *menſes*, or floodings, are confined to a true or falſe *plethora*; and a too great velocity in the circulation of the blood; which occaſions, that it forces too

too often, too long, and too much, the orifices of the veinous *appendices*.

III. The differences, which depend on the place, where the ſolution of continuity, or the local diſpoſition, which cauſes the diſorder, is ſituated, are neither numerous, nor important.

1°. This place is almoſt always in the cavity itſelf of the *uterus*; and rarely in the *vagina*. What is ſaid above, in *Chapter I*, of the place, from whence the *menſes* come, may be examined.

2°. In fixing this cauſe in the *uterus*, where it commonly is: it may be in the *fundus*; the ſides; or the orifice of the *uterus*; which occaſions, that the patients feel the pains attending it, in different places; as at the reins; hips; thighs; groins; breech, or *pubis*.

3°. Suppoſing this cauſe in the *vagina*, where it may ſometimes be, it may be placed higher, or lower, in the anterior, or poſterior parts of the duct; which occaſions, that the effects of it are referred ſometimes to the bladder, and ſometimes to the *uterus*.

§. V. SYMPTOMS.

1°. In all floodings, the patients are weak, low-ſpirited, and faint, to a greater or leſs degree, according to the copiouſneſs, or the duration of them. This is a neceſſary conſequence of the weakneſs, with which the contraction of the muſcles is made; and that weakneſs proceeds both from the defect of animal ſpirits, when the blood itſelf is defective; and from the muſcular fibres wanting their due tone, when the blood-veſſels, which ſupply them, are not ſufficiently full.

2°. The pulſations of the heart, and conſequently thoſe of the arteries, are little, ſlow, and weak; as well from the default of blood, as from that of animal ſpirits. *From the default of blood:* becauſe the blood can only produce ſmall, ſlow, and weak contractions, when it paſſes into the ventricles of the heart only in ſmall quantities, ſlowly, and weakly. *From the default of animal ſpirits*, of which the quantity, velocity, and force,

force, diminiſhing with the blood, occaſions that, they can then only produce little, ſlow, and weak contractions of the heart.

3°. The face is pale, and diſcoloured: becauſe the blood, which ought to give it a colour, is defective in floodings; and does not then fill, as it ought, the capillary veſſels of the ſkin. Moreover, although the paleneſs be univerſal, it is more obſervable, in the face, than elſewhere; becauſe, as the ſkin is finer, the livelineſs of the hue appears more there in the ſtate of health; and conſequently the paleneſs muſt be more ſenſible there, in the ſtate of diſeaſe.

4°. The extremities are cold, as well becauſe the blood, which is the ſource of the heat, can paſs thither only in ſmall quantity, when it is deficient in the body; as becauſe, the heart, of which the contractions are weakned, can only propel it weakly; and even more weakly there than in the other parts, on account of theſe being more remote.

5°. The patients ſoon loſe their appetite; and their diſguſt increaſes, in proportion to the continuance of the diſeaſe; which proceeds from two cauſes; 1°. From that the animal ſpirits flow in leſs quantity, in the nervous fibres of the tongue and ſtomach; which diminiſhes the ſenſibility of thoſe organs. 2°. From that the blood, being deficient, furniſhes leſs *ſaliva* and lymph of the ſtomach; which diminiſhes the action of thoſe levens.

6°. However careful the patients may be to eat but little, and of thoſe things which are wholſome, they ſtill digeſt badly what they do eat, either from the deficience of the digeſtive levens, which are wholly wanting, or only ſupplied in ſmall quantity; or from the *inertia* of the fibres of the ſtomach, which, being in a ſtate of relaxation, do not aſſiſt the action of the levens.

7°. The patients grow apparently lean, for ſeveral reaſons. Firſt they eat but little. 2°. They digeſt badly what they do eat, and draw little chyle from it. 3°. Laſtly, they are expoſed to a continual, and ſometimes

times very great loſs of blood: which makes a greater expence of nouriſhment than the food taken can ſupply.

8°. Obſtructions of the *viſcera* of the *abdomen* are often formed in theſe diſeaſes: becauſe the humours, which are ſecreted there, ſtagnate in their canals; not being propelled through them as commonly, either by the circulation of blood, which is too much rebated; or by the elaſticity of the fibres of the *viſcera* themſelves; which are not of a due tone, from the deficience of animal ſpirits.

9°. The patients fall gradually into the ſtate, known in medicine, by the name of *cachexy*, in which there is more lymph and *ſerum* in the veſſels than blood: on account that the veſſels, in proportion as the blood is loſt, fill with *ſerum*, furniſhed by the fluids taken as drink. For the ſame reaſon, in all the diſeaſes, where bleeding is frequently repeated, the blood afforded towards the end is always more ſerous than that at the beginning.

10°. The ſerous lymph, which abounds then in the blood, is rarely natural: but more frequently depraved, either by the mixture of ill prepared chyle, that the *primæ viæ* furniſh, or by the mixture of recrementitious humours, particularly of the bile; which the obſtructions of the *viſcera*, eſpecially the liver, retain in the blood: whence the *cachexy* is augmented and aggravated.

11°. In this ſtate, when the patients have ſtood or ſat a long time, the feet, and legs, become œdematous; becauſe, on one hand, the blood, which ſtagnates in the veſſels of theſe extremities, from whence it cannot return, but with difficulty, on account of its aſcending, ſuffers the ſerous lymph, with which it ſurcharged, to ſeparate more copiouſly in them, from whence it cannot eaſily return: and, on the other, the lymph, that overflows the lymphatic veſſels of theſe parts, cannot get back, but with difficulty, and ſlowly; and, in conſequence of ſtagnating, tumefies all its own veſſels.

12°. On

12°. On the contrary, when the patients keep their beds, the ſwelling of the inferior extremities goes down; becauſe the horizontal ſituation of the body facilitates the circulation of blood and lymph in the parts: but at ſuch times the face, the eyelids, and the part round the eyes, become œdematous: as theſe are the parts of the body which are moſt lax, and have the leaſt elaſticity; and in which the motion of the blood, and particularly the lymph, is the moſt eaſily diminiſhed.

13°. The *œdema* increaſes gradually, by the continuation of the diſorder; ſeizes the legs, thighs, and loins; and becomes at laſt an univerſal *anſarca*. Sometimes even the *ſerum* is extravaſated in the *abdomen*, or the *thorax*, where there are, in theſe cavities, any obſtacle, or local obſtruction, which impedes there the circulation of the blood, and the lymph.

14°. When the patients are ſtanding, or ſitting; and the orifice of the *uterus* is ſufficiently free; the blood flows out of the *uterus* in proportion, as it comes into it; and in the ſame ſtate; that is to ſay, fluid, red, hot, and without ſmell: but, if the orifice of the *uterus* be cloſed; or the women be laid down; the blood retained in the *uterus*, is fixed there, and produces clots, more or leſs large, hard, and fœtid; according as it ſtagnates there a longer or ſhorter time.

15°. Theſe clots, when they preſent themſelves to paſs out, put the fibres of the *uterus* into a ſyſtaltic contraction; and force, by this means, a paſſage; which is not however done without pain in the *uterus*; and particularly in its orifice. This pain is greater, or leſs, according as the parts are more or leſs inflamed, irritated, and ſenſible; as the orifice is more or leſs contracted; and as the clots are more or leſs large, or hard.

16°. The pain, which the patients feel, under ſuch circumſtances, often throws them into fainting fits; on account of the ſympathetic reflux, which is made at the heart; and which diminiſhes its motion. The

ſame

ſame thing happens, and for the ſame reaſon; when the ſtomach ſuffers by bad digeſtion, or the bowels by wind. The patients moreover faint often; when they are affected by any accidental trouble of mind: or even when they exert themſelves in any extraordinary manner; or keep themſelves ſtanding an inſtant: becauſe, in theſe caſes, the circulation is diminiſhed on a ſudden. Faintings, and ſwoonings, are therefore, frequent accidents, in all conſiderable floodings.

17°. It may even happen, and it ſometimes does, that the paſſing out of the clots, when it is attended with acute pain, brings on convulſions, or ſpaſmodic motions; becauſe that then, the violent reflux, which is made in the *uterus*, puts ſeveral parts, that have ſympathetic relations with it, into ſtrong and neceſſarily convulſive contractions.

18°. When there is no ſolution of continuity in the *uterus*, the floodings, when they ſtop, are either not ſucceeded by any diſcharge of *fluor albus*, or only by a ſlight one. But it is quite otherwiſe, when there is a ſolution of continuity, particularly if it be conſiderable; extended over the whole of the *uterus*; of long ſtanding; &c.

§. VI. DIAGNOSTIC.

The diagnoſtic turns upon four articles; 1°. On the nature; 2°. On the kinds; 3°. On the cauſes; 4°. On the ſeat of the diſeaſe: and there are none of theſe articles but what merit to be diſcuſſed with attention.

I. With regard to the nature of the diſorder, the diagnoſtic carries nothing of difficulty with it. When a woman, or a girl, is ſubject to a diſcharge of blood, more continued, or more frequent than common; particularly if it weaken her; and bring on the greateſt part of the accidents, which are enumerated above in deſcribing this diſorder, *Article I*, it may be taken for granted, that this is a diſcharge from the *uterus* againſt nature.

None

None but girls, or women, very unexperienced, can confound the diſcharges of this kind with the voiding blood from the bladder. And even in ſuch caſe the miſtake could not continue long, for it would be eaſily cleared up, 1°. By teaching them the difference betwixt the *urethra*, and *vagina*; in order, that they may diſtinguiſh from which of theſe two paſſages the blood flows. 2°. By making them obſerve, whether the blood ever flows, but when they make water; in which caſe, it muſt come from the bladder; or whether conſtantly, without any effort to make water; in which caſe it muſt come from the *uterus* or the *vagina*. 3°. By examining one's ſelf, the urine, they have made; for if the blood come from the bladder, it muſt be very much, and very intimately mixt with it: whereas it would not be ſo, or only in ſtrings, and interſperſedly, if it came from the *vagina* or the *uterus*. 4°. Laſtly, if there yet remains any doubt, by making the patients examine: or, if it be neceſſary, by examining one's ſelf: in order to form a judgment, whether it be from the *urethra* or *vagina* the blood flows.

II. There is ſcarcely any more difficulty in diſtinguiſhing the different kinds of diſcharges of blood, which comes from the *uterus*.

It is at firſt only to be examined, if the diſcharges retain any thing of the periods of the *menſes*; in which caſe they ſhould only be conſidered ſimply, as *exceſſive menſes*: or if they retain nothing at all of it: in which caſe, they muſt be treated as true floodings.

In the firſt caſe, it is only to be obſerved from whence the *menſes* are exceſſive: whether it be by copiouſneſs; or duration; or only the frequency of the returns; whether it be by the copiouſneſs, and the duration, both at the ſame time; by the duration and the frequency; or by the frequency and the copiouſneſs; or, in ſhort, whether it be, by the copiouſneſs, duration, and frequency of the returns all at the ſame time; in order to decide, if the exceſſive *menſes* be of the *firſt*, *ſecond*, or *third* order.

There

There is nothing more to be done in the ſecond caſe, than to judge of the copiouſneſs of the flooding. If it be very great, it is an *hæmorrhage* of the *uterus*; whether the diſcharge laſt a long time, or ceaſe ſoon. If it be, on the contrary, moderate, but long, and obſtinate, it is a *ſtillicidium* or *ploratus uteri*; that is to ſay, a dripping or weeping of the *uterus*.

III. It is much more difficult to know, in a certain manner, the cauſes of the different kinds of flooding: and often, whatever attention may be given to it, nothing can be had with relation to this article, important as it is to the cure, but meer conjectures.

1°. For inſtance, there is reaſon to ſuſpect ſome ſolution of continuity is made in the *uterus*, 1°. When the diſcharges contrary to nature are true floodings: 2°. When ſome cauſe, capable of producing a ſolution of continuity in the veſſels of the *uterus*, has preceded: 3°. When the patient feels heat, tenſion, and pain in the body of the *uterus*: 4°. When the ceſſation, or the intermiſſion of the diſcharge, are never perfect: but there always remains ſome dripping, ſometimes of a white, ſometimes of a red colour: 5°. When the dripping, which remains, is acrid, of a bad ſmell, and to be ſuſpected of purulence.

2°. Provided there be a certainty of a ſolution of continuity in the *uterus*, it is not very material of what kind it may be: becauſe the ſame remedies are equally proper in all: and moreover lacerations, gaſhes, and open *varices*, all turn at laſt to ulcers. Nevertheleſs, if it be deſired to puſh the inquiry to this point, there will be foundation to ſuſpect,

That the ſolution of continuity proceeds from ulcers; when the humour, which is diſcharged, is purulent; when there has previouſly been any ill treated inflammation, or abſceſs: when the patients have been a long time ſubject to a very acrid *fluor albus*; and when there are proofs, that injections of a corroſive nature, have been made into the *uterus*.

That they are ſimple lacerations, or gaſhes not ulcerated; when there is no appearance of purulence

in the humour that is discharged: and when it is, moreover, known, that the *uterus* has suffered great distentions, and stretchings, in a hard labour, or in the extract of the afterbirth.

That they are *varices* burst; when the discharge happens suddenly, is very abundant, and has succeeded to a suppression of the *menses*, which has been of long continuance, and attended with heaviness, and tumefaction in the *uterus*: or that it comes on, in consequence of a *schirrus*, or cancer in the *uterus*; which, by turning the course of the circulation, has rendered several of the veins varicous.

3°. It is conjectured, on the contrary, that there is no solution of continuity in the *uterus*; and that the disorder only proceeds from the abundance, and the rarefaction of the blood, or the depraved state of the vessels of the *uterus*; when the circumstances are found to be directly opposite to those laid down in *n°* 2: that is to say; 1°. When the discharges contrary to nature are only excessive *menses*: 2°. When no cause, capable of producing a solution of continuity in the *uterus*, has preceded: 3°. When the patients perceive, neither pain, nor tension, in the *uterus*; nor even much heat: 4°. When the cessation, or the intermission, of the discharge is perfect, absolute, and without any dripping remaining: 5°. When there is neither acrimony, smell, nor appearance of purulence, in the humour, which is discharged at the end of the flooding; supposing there still remains any dripping.

4°. When there is no reason to suspect any solution of continuity in the *uterus*, a *plethora*, or a rarefaction of the blood; or the rapidity with which it circulates; must be regarded, as the *first* cause of the disorder; and as that, indeed, which is most common: and a conviction may be had of the reality of these causes: 1°. From the state of the pulse; which is full, hard, great, frequent, and quick: 2°. From the inspection of the face of the patients, which is fresh, rosey, and full of colour, at least when the disorder begins: 3°. From the quick success of repeated bleedings, early practised.

The

The second rank may be given to the relaxation of the veinous *appendices* of the *uterus*; when their elasticity being defective, they open too readily, and reclose themselves too slowly. The signs, which indicate this cause, are, 1°. The continuance, and the obstinacy of the disorder: 2°. The weak and delicate constitution of the patient; which gives reason to presume a weakness in the vessels, and coats of the *uterus*: 3°. The number of pregnancies, which have preceded; and which have weakned the elasticity of the fibres of the *uterus*; especially in women, who have begun too young to have children: 4°. The continuance of the *fluor albus*; which has relaxed the vessels of the *uterus*.

Lastly, The faultiness of the vermicular or lactiferous vessels of the *uterus*, when their excretory orifices are stopt up, or too strait; which produces too frequent, copious, and long continued *menses*; may be regarded as the *third* cause of the disorder; and as that which is most rare. This cause never takes place, but in patients, who have been a long time irregular in their *menses*, or have had them very late, and in whom, for these reasons, there is room to suspect, that the excretory orifices of the lactiferous vessels are obstructed, or naturally too close.

IV. It is not of much consequence to endeavour to distinguish the seat of the disorder; that is to say, the place from whence the blood comes: it so seldom comes from the *vagina*, that this case may be overlooked, as if it never happened. But if this inquiry be thought of any service for the prognostic, or the cure, it may be easily satisfied by examining the patient, in order to judge of the state of the vessels and coats of the *vagina*; or what is yet more important and decisive, the state of the orifice of the *uterus*, which is always dilated and open, when the blood flows from the *uterus*; but shut, and close, when it comes from the *vagina*.

As to what concerns the particular place, where the cause of the disorder is seated in the *uterus*, or *vagina*, it is easy to be ascertained; if the nicety of exa-

mination be carried so far; by informing one's self of the different places, to which the patient refers the effects of tension, heat, and pain, which she feels: for there is ground to infer thence, that the parts of the *uterus*, or the *vagina*, the most affected, are those, which correspond with the places where the patient feels the disorder most.

§. VII. PROGNOSTIC.

1°. In general, every flooding of the *uterus*, of what kind soever it be, and from what cause soever it proceeds, is a bad disease, and often dangerous; on account of its bringing on symptoms of great consequence: as disgust of food, weakness, tabidness, *syncope*, &c; and that it has often fatal consequences; as cachexy, dropsy, consumption, &c.

2°. A yet worse prognostic should be made on the floodings, which are of long standing; not only because their duration is a mark, that they depend on a very obstinate cause; but also because the disorder must, by time, greatly change the quality of the blood, and the elasticity of the vessels.

3°. The same judgments may be made on the floodings, which happen to old women; in whom they are almost always fatal: as well because that, in them, who have not the *menses*, the flooding can only proceed from some violence, which has lacerated the vessels; as that the blood is not of a due sweetness, nor sufficiently balsamic, to consolidate the divided vessels; and as, moreover, the vessels themselves have not sufficient force, and spring, to close themselves; and, by closing, to stop the discharge.

4°. Floodings are generally more difficult to be cured, than excessive *menses*: because the former depend commonly on solutions of continuity of the vessels of the *uterus*; which are not easy to be remedied: whereas the latter proceed, most frequently, only from dilatation, softness, or relaxation of these vessels: which recover themselves, provided the causes, which have brought them to that state, are removed.

5°. Exceſſive *menſes* of the firſt *order*, are leſs dangerous, and more eaſy to be cured, than thoſe of the *ſecond*: and thoſe of the *ſecond*, than thoſe of the *third*: becauſe thoſe of the *firſt* depend only on one cauſe alone: whereas thoſe of the *ſecond* depend on the concurrence of two cauſes: and thoſe of the *third* on three.

6°. It is more eaſy to cure the floodings, which depend only on the quantity, rarefaction, and impetuoſity of the blood, than thoſe which ſuppoſe ſome faultineſs in the interior of the *uterus*: becauſe the flooding itſelf diminiſhes the quantity, rarefaction, and impetuoſity of the blood; and that, at all events, it is eaſy to remedy it by bleeding. Whereas the faultineſſes of the interior of the *uterus* are always very obſtinate in yielding to medicines.

7°. Among the different vitiations, which may happen to the veſſels of the *uterus*, dilaceration, eroſion, and exulceration; or, in other words, ſolutions of continuity; are more difficult to be cured, than relaxation, dilatation, undue tone, and the *inertia* of the veſſels; that is to ſay, than the other faults which do not ſuppoſe any ſolution of continuity. The floodings, therefore, which depend on the firſt cauſes, muſt be always more difficult to be cured, than thoſe which depend on the ſecond.

8°. The floodings, that are very abundant, are more dangerous than the ſimple drippings of the *uterus*; becauſe, in the abundant floodings, much blood is loſt; and very quickly; which cauſes accidents more numerous, ſudden, and bad: whereas the dripping of the *uterus*, where the loſs is always leſs great, may be ſupported, and for a conſiderable time, without any very momentous conſequence.

9°. Nevertheleſs, it is often more difficult to cure the dripping of the *uterus*, than copious floodings: becauſe theſe ſuppoſe always ſome antient faultineſs in the interior of the *uterus*; and often ſuch as has degenerated into an ulcer: and of which, conſequently, the cure is very difficult: whereas the abundant floodings proceed oftener from the quantity, rarefaction,

and velocity of the blood; or are owing to nothing more in the *uterus*, than recent lacerations; which may be sometimes healed without much trouble.

§. VIII. *Method of cure.*

The method of cure of floodings has relation to three cases, 1°. That of a copious and actual discharge, whether it be casual; or only a return of excessive *menses:* 2°. That of an actual discharge, moderate indeed, but long, and obstinate; that is to say, of a dripping of the *uterus*; whether the discharge preserve any relation to the period of the *menses*; or do not preserve any: 3°. That of one of those two kinds of discharge already cured, or at least suspended; but subject to returns; which it is of consequence to prevent. The method of cure, that is proper to each of these cases, will be here explained briefly; but with sufficient distinctness.

FIRST CASE.

Actual and copious flooding, or hæmorrhage of the uterus.

As this case is urgent, it is proper to apply a quick and effectual remedy to it: and, in order to this, to endeavour to effect, with prudence, the four following intentions of cure: 1°. To diminish the quantity of blood, which passes into the vessels of the *uterus*; and the impetuosity with which it does pass: 2°. To strengthen the elasticity of the vessels of the *uterus* too much dilated, or relaxed: 3°. To moderate, by narcotics taken in several small doses, the too great sensibility of the *uterus*, and the systaltic contractions, which this sensibility brings on; and which supports the discharge of blood: 4°. Lastly, to quiet, and moderate the rarefaction of the blood; or, at least, to correct its too great fluidity, and acrimony; if there be proofs, that it is faulty in one of these points. On these principles,

1°. The patients muſt be directed to keep perfectly quiet; and with the ſtricteſt conſtancy in bed. The moſt proper poſition is, to lie on the back: becauſe the *uterus* is then more free. Several authors adviſe, to keep the patients with the breech raiſed higher than the belly; and it muſt be confeſſed, that this ſituation ſeems, at firſt, very proper, to moderate the diſcharge: but it is eaſily collected, that it tends to occaſion the blood's being retained in the cavity of the *uterus*; and concreting there in clots; which can only paſs out by fits; and not at all without contractions of the *uterus*, of which the leaſt effect is to renew the extravaſation of the blood. Inſtead, therefore, of adopting this practice, it is much better to put the patients in an horizontal ſituation; which leaves the blood free to be diſcharged, as faſt as it is extravaſated, without giving it the time to coagulate. Common mattraſſes of wool are unſuitable in this diſeaſe: becauſe they heat the patients, and retain the blood under them, without ſuffering it to penetrate. It would be better to lay them on mattraſſes of ſtraw: but if they find theſe too hard, thoſe of hair may be beſt uſed. Moreover, it is not ſufficient, that the patients be in bed; but it is proper, they take the ſtricteſt care not to move, ſpeak, and, if they can avoid it, even not to think. At leaſt it is certain, that too briſk motion, too loud talking, and too ſenſible inquietude, are capable of increaſing, and ſometimes of renewing the flooding.

2°. In this caſe, bleeding in the arm is the moſt certain, and the moſt quick of all remedies. It diminiſhes the quantity of blood, which goes to the veſſels of the *uterus*, by diminiſhing the quantity, that is in the body. By diminiſhing the effort of the contractions of the heart, it diminiſhes, at the ſame time, the impetuoſity with which the blood is propelled in theſe veſſels. It tends then, in a double manner, to diminiſh the force, which the blood exerts on the open veſſels of the *uterus*, both by the diminution of the quantity of blood that goes thither; and by the

diminution of the impetuosity with which it does go; and, consequently, nothing is so efficacious as bleeding in the arm, to put these vessels in a state of reclosure. But it is necessary, that this relief come soon; and while the vessels still preserve the whole of their elasticity: for so certain an effect must not be expected, when, in consequence of being a long time dilated, they have lost their due tone. From whence, it is very easy to conclude, that six bleedings, quickly practised, will have more success, than twelve practised too late; or at too great intervals.

It is not possible to determine, either the number of the bleedings, or the quantity of blood, that should be taken at each. This must be regulated by a consideration of the strength, and age of the patients; their state of pulse; the violence of the disorder, &c. But it may be said in general, that in a great flooding, where there is iminent danger, the bleeding should be repeated at first, from four hours to four hours; or, at least, for four or five times, in the first twenty-four hours; and each should be, from twelve to fifteen ounces; unless some very strong counter indications forbid it.

The day after, some little diminution may be made in the number, or quantity taken at each time; if it be observed, that the violence of the disorder be abated; but it should be remembered, that it is better in this disease, there should be two bleedings more than is requisite, than that one should be omitted that is necessary. Persons about the patient are always ready to object idly, that she has already lost a great quantity of blood; and the repeating the bleeding, so often, is taking away all her strength: but a physician, who examines the state of the pulse, and judges with accuracy, should not be induced to stop on account of these remonstrances.

It must, however, be acknowledged, that bleedings were not so much formerly practised in this disease. Instead of it, strong frictions[1] were con-

[1] Galenus, I. *ad Glaucon. Cap.* 14.

stantly

ſtantly employed in the arms, and ſuperior parts [1]; very light ligatures made on the fingers, arms, legs, and knees; and large cupping-glaſſes [2] applied on the breaſts, &c. All theſe methods of practice were very haraſſing to the patient; and but of little efficacy for the cure of the diſorder; but they were employed, however, and with confidence: becauſe they had the ſuffrages of the moſt celebrated phyſicians of antiquity. It is, not without difficulty, this prepoſſeſſion has been removed. It required time to know; and, perhaps, ſtill more to dare to declare; that theſe practices, ſo ſupported by authority, were leſs ſerviceable than bleeding; not to ſay, that they were wholly without uſe. But, at length, it has been ſaid, and with ſuch effect, that they are intirely laid aſide at preſent.

3°. Of itſelf, purging is not indicated in floodings; and much leſs vomiting. It ſeems even, that there is reaſon to fear the efforts of ſtool, or vomiting may augment it: and, indeed, that often happens. Nevertheleſs, there are occaſions, in which it is ſerviceable, and even requiſite, to purge the patients; and ſometimes even to give them vomits: and this has often been attended with ſuch ſucceſs, as to ſtop the flooding immediately. It is true, indeed, there is a difficulty in diſtinguiſhing theſe occaſions *judicium difficile*. It will be ſhewn below, in ſpeaking of the precautions neceſſary in the cure of floodings, by what ſigns they may be diſcovered. Nothing more is neceſſary here, than to remark that the purges, employed in theſe caſes, may be ſuch as are common; as manna, caſſia, the vegetable ſalt, and even rhubarb, in ſubſtance; and tamarinds, and follicles of ſena in infuſion. As to vomits, the moſt ſafe, and uſeful, is *ipecacuana* in powder, in the doſe of twenty, or twenty-five grains, in a diſh of tea. But in theſe caſes, even where the

[1] Galenus, I. *ad Glaucon. Cap.* 14. Hippocrates, II. *de Morb. Mulier. in Princ.* Aëtius, *Tetrabib. IV. Sermon.* 4. *Cap.* 64. Paulus Ægineta, *De Re Medicâ. Lib.* 3. *Cap.* 64.

[2] Hippocrates, *Sect.* 5. *Aphoriſm.* 50.

remedies are the moſt indicated, they muſt never be employed, but after having ſufficiently emptied the veſſels by bleeding.

4°. In proportion as the quantity of blood in the body is diminiſhed, and the veſſels of the *uterus* rendered more lax by bleeding, it ſhould be endeavoured to recloſe the veinous *appendices* of thoſe veſſels, which are too much dilated, and even ſometimes divided: and, in this view, it is proper to uſe aſtringents in form of apozems, or boluſſes.

Theſe apozems may be made with the decoction of the aſtringent plants; as plantain, borage, yarrow, white nettle, and ſeveral others of the ſame nature, that may be ſeen in the following article. But it is better to employ, in apozems, the juice itſelf of theſe plants expreſt, and well clarified, in the quantity of three or four ounces for each doſe; to which is added, about an ounce of ſome proper ſyrup; as of dry roſes, myrtle berries, coral, pomegranate, and comfrey.

With reſpect to the boluſſes, the ingredients may be dragons blood, crude *terra Japonica*, maſtic, red coral prepared, amber, prepared egg-ſhell, roch alum, balauſtines, pomegranate bark, *lapis hæmatites*, aſtringent ſaffron of Mars, &c. Two, three, or more of theſe drugs, ſhould be ſelected; and, being pounded, ten, twelve, or fifteen grains of each ſhould be choſen for every doſe; and being incorporated with ſome of the ſyrups, that have been mentioned, they ſhould be made into a bolus. Amongſt theſe boluſſes, thoſe moſt uſed, are made with dragons blood, roch alum, and brown ſugar, levigated very finely, and employed each in the quantity of fifteen grains for every doſe.

As broth only is given to the patients the firſt days, from four hours to four hours, one of the apozems, or boluſſes; or, where the diſorder is urgent, even one of each at the ſame time; are given in the intervals of the broth. At the end of two hours, betwixt theſe medicines and the broth, ſome ptiſan acidulated

acidulated is alſo given two or three times, as drink to the patient, to make the medicines paſs the better.

5°. When the flooding is violent, and there is a neceſſity to check it quickly, one or two pinches of the flower of Carline thiſtle, in Latin, *ſcolymus ſylveſtris*, or *chamæleon*, cut very ſmall, may be taken in each meſs of broth: or, in defect of theſe flowers, a dram of the *ſcrotum* of a goat, or hare, diluted with the broth: theſe remedies have nothing ſuſpicious in them, and experience has ſhewn, that they are very proper to check, and even to ſtop floodings.

6°. As there are always, in copious floodings, dull, painful ſenſations in the *uterus*, or its neck, cauſed by the eruption of the blood, its retention in the *uterus*, or the paſſing out of the clots; and as theſe ſenſations keep the patients in an involuntary agitation; and what is worſe, throw the *uterus* into contractions, which ſupports, and augments the diſorder; it is of the laſt importance, to quiet theſe ſenſations by the uſe of narcotics. In this intention, one or two heads of white poppies ſhould be boiled in the ptiſan; or there ſhould be added a little ſyrup of *diacodium* to each apozem; or ſome drops of anodyne tincture to each bolus: and the quantities, proportioned in ſuch manner, that they may keep the patients in a kind of inſenſibility, without throwing them into too great a degree of doſing.

7°. It may be eaſily judged, that it is proper in floodings, to keep the patients to a very ſlender diet, to avoid replacing, by too abundant freſh nouriſhment, the quantity of blood which is taken away by the bleedings; and that only a very inſipid, and even ſomewhat glutinous food, ſhould be allowed them, to ſweeten the blood; and render it more proper to conſolidate the veſſels. On this account, the patients are confined to broth, which is only given them from four hours to four hours. This broth muſt be weak, and without ſalt; and it is commonly made with a chicken, or a ſlice of veal: and when it is deſired to render

render them more incraſſating, one or two roots of yellow mallows ſplit, or cut into ſlices, is added: or the broths themſelves may be made with a knuckle of veal, or even with fiſh, when there is occaſion to quiet the effervescence, and rarefaction of the blood; the belly of the chicken is to be filled with melon ſeeds, huſked and bruiſed; or an ounce of it tied up in a linnen rag, is put into the pot: or each meſs is made an emulſion, by paſſing it over a dram or two of the ſeed, reduced into a very fine paſte. Sometimes, in the ſame circumſtances, it is thought ſufficient to boil ſome roots or leaves of ſorrel in the broth; and then the not making them into an emulſion may be diſpenſed with.

8°. The patients muſt be kept to this diet, ſlender as it is, ſo long as the violence of the diſeaſe continues. When it is abated, a nouriſhment ſomewhat more ſubſtantial may be permitted: but, inſtead of making the broths ſtronger, by adding beef or mutton, which renders them at the ſame time more acrid, it is much better to put into the pot a bowlful of rice, in order to give a little more ſolidity to them; or to add, to each meſs, ſome ſpoonfuls of rice, or oatmeal, well boiled; or of lentil potage; or to permit a little jelly to be taken in the intervals of the broth. In the ſequel, according as the cure advances, there may be allowed yolks of eggs in the broth; eggs boiled in the ſhell; a little rice, or ſoup; &c: but care muſt be taken not to be too forward in this.

9°. From the beginning, all uſe of wine ſhould be prohibited; and nothing given for common drink, but a ptiſan ſlightly aſtringent. In the following article, a great number of plants, that may be employed, will be enumerated; but thoſe moſt in uſe are the roots of the comfrey, common knotgraſs, biſtort, &c; and the leaves of yarrow, plantain, white nettle, &c. It is not proper to employ more than one of theſe kinds of roots, and one of the leaves, that the ptiſan may be very weak; and paſs the better: and that the patient may drink more of it. A ſlight decoc-

tion

tion of the wood of the maſtic tree raſped, or a weak tincture of *terra Japonica*, is often adminiſtered with ſucceſs.

10°. Preference ſhould be given to thoſe ptiſans, of that which is made with the rind of two or three ſour unripe oranges; or with the root of ſorrel: when there are proofs, or even ſuſpicions only, of the ſolution or rarefaction of the blood; and, in theſe caſes, ptiſans of this kind act ſometimes ſucceſsfully; which has induced ſeveral authors to recommend them as ſpecifics.

11°. As it ſometimes happens the patients fall into fainting fits, either more ſlight or deep, which always alarm, and indeed with reaſon, ſomething ſhould be always had in readineſs, that may be uſed on ſuch occaſions. At firſt it may be thought ſufficient to put under the patient's noſe vinegar ſimply, vinegar of tarragon, or theriacal vinegar, *ſal volatile oleoſum*, *l'eau des Carmes*; &c; to rub their temples and noſe with vinegar, Hungary water, *l'eau des Carmes*, &c; to throw cold water on their faces, &c: but, if this be not ſufficient to bring them to themſelves, it is proper to give them the *confectio-hyacinthi*, or *alkermes*, in orange-flower water; or a ſpoonful of the wine of Rota or Alicant; or even a little of the *l'eau des Carmes* mixt with water.

12°. As theſe faintings proceed often only from ſome clot of blood detained at the orifice of the *uterus*; which, in ſtriving to paſs, it ſtops up the paſſage; it is proper in ſuch caſes to draw out the clot as ſoon as poſſible: carefully avoiding, however, to do the leaſt violence either to the *uterus*, or its orifice.

Moſt commonly, by the method here propoſed, prudently and carefully conducted, either the flooding is abſolutely ſtopt; which leaves nothing more to be done, than what regards the recovery: or at leaſt it is diminiſhed to ſuch a degree, as to be reduced to a ſimple dripping of the *uterus*; of which the method of cure will be ſeen in the next article. But it ſometimes

times happens, alſo, when the veſſels of the *uterus* are dilacerated, or eroded, that the violence of the flooding maintains its ground, in ſpite of the remedies hitherto propoſed; and in ſuch caſes a phyſician muſt employ the moſt effectual remedies, without thinking too much of the danger that may reſult from their uſe. Theſe remedies are almoſt all exterior; as fomentations, plaſters, cataplaſms, peſſaries, injections in the *uterus*, lotions of the feet and legs in cold water, &c; of which we are going to ſpeak in proper order.

I. Fomentations are the leaſt efficacious of the external remedies. They are made with a ſtrong decoction of the roots of biſtort, or of common knotgraſs; of the leaves, or ſeed-veſſels of plantain; and of *equiſetum*, or horſetail; of red roſes; of pomegranate bark; of balauſtines, myrtle berries; &c; boiled in the water of a ſmith's forge: and a piece of linnen doubled ſeveral times, or of fine flannel, is to be dipt in them, and put upon the belly, or the *pubis*, after being preſt. Sometimes it is thought ſufficient, to apply a ſponge, that has been boiled in vinegar; care being taken to preſs it firſt. But it is proper to intimate, that, in order to render theſe fomentations uſeful, they ſhould be employed of a very ſmall degree of warmth; or indeed almoſt cold; without which they would augment the flooding by the heat, rather than diminiſh it by their proper quality; and this remark holds good, in the ſame manner, with all the topical remedies that follow.

II. Plaſters are not more efficacious than fomentations; or perhaps even leſs. They are applied on the loins, and the navel, in order to leave room for the other remedies. They may be compounded, for this particular purpoſe, of any aſtringents, that may be choſen: but commonly thoſe are employed which are found in the ſhops: as the *emplaſtrum pro matrice*, *emplaſtrum de maſtiche*, *emplaſtrum comitiſſæ*, *emplaſtrum contra rupturam*, &c.

III. Cataplaſms

III. Cataplasms have a little more reputation; and appear to merit it. They are applied on the *pubis* only; and sometimes on *the pubis*, and *os sacrum*. They are composed in several manners; some are made with leaves of nettles fryed in a pan; with spiders webs fryed in the same manner with a little vinegar; with soot in powder, beaten with the yolks of eggs, and a little vinegar of roses, of which a kind of omelet is made; with bole in powder, diluted with the juice of plantain, and a little vinegar; with the dung of an ass or an hog, diluted with a little vinegar; and with plaster reduced to powder, mixt with a little gum Arabic torrefied, and tempered into a soft paste, with three or four whites of eggs well beaten.

IV. Pessaries are much the same as plasters; but as they are put nearer the seat of the disorder, they are considered as more efficacious. There is, nevertheless, an inconvenience that attends their use: which is, that by stopping the passage outwards of the blood, they occasion it to stagnate in the *uterus*, and coagulate there in clots; which is not to be prevented by any other means, than avoiding to leave the pessaries for any long time in their place.

These pessaries are made, 1°. first with the juices of astringent plants; as plantain, yarrow, common knotgrass, and nettle: and with astringent powders; as those of balaustines, galls, pomegranate bark, &c: which are tempered together with the white of an egg, of which, a kind of stiff paste is made; and wrapt up in gause, or clear taffety, in order to be able to introduce it into the *vagina*.

2°. With the powders of the *hypocistis*, mastic, and dragons blood, tempered in the juice of purslain, or of plantain; but left sufficiently fluid, to admit of being absorbed, by little balls of cotton: which, being charged with this juice, are to be introduced into the *vagina*, after having tied a thread to each.

3°. With

3°. With the dung of an hog, or ass, impregnated with the juice of plantain or purslain; and tempered with a little mucilage of the seed of quinces, or of gum tragacanth, prepared with rose water, of which a stiff paste is made; and wrapt up in gauze, or taffety, to render it capable of being introduced into the *vagina*. This last pessary is recommended as an infallible specific.

V. The effect of injections in the *uterus* may be yet much more depended upon, than that of the pessaries: because they reach with more certainty to the seat of the disorder. But, for this reason, it is also requisite to employ them with great prudence; and never to compose them; but of such astringents as are not capable of affecting the substance of the *uterus*.

They may be made, with full security, of the decoctions of the roots or leaves of astringent plants; or their expressed juices. Among these juices, the most recommended are, those of plantain, nettle, yarrow, comfrey, &c. These decoctions, or juices, are sometimes employed without any addition: but sometimes a little gum tragacanth is dissolved in them; or a little starch or dragons blood is tempered with them. If we might believe the greatest part of the authors, the preference would be given to all other injections, of that of the expressed juice of the dung of a young ass; the virtue of which is boasted, as being approved in cases of flooding.

VI. It was in use among the antients, to make oxycrate be drunk in all losses of blood, and even in floodings. It is true, indeed, they used it with more moderation in such cases: because of the delicacy and nervous substance of the *uterus*. This practice does not obtain at present: but instead of oxycrate we make use in these cases, when the danger is pressing, of spirit of salt, or vitriol, dulcified; or what is better, the water of Rabel; of which, a sufficient quantity to give an agreeable acidity, is added to the ptisan; which is sweetned, and corrected, with some of the

syrup

ſyrup of comfrey, or dry roſes. I make uſe of this laſt remedy with very great ſucceſs.

VII. The patients feet may be held with great ſafety in cold water, or even, if it be preferred, in an aſtringent decoction; which has been ſuffered to grow cold. It has been ſhewn, in the *preceding Chapter*, that warm water, in which the feet are dipt, by drawing the blood into the trunk of the *aorta deſcendens*, draws it, at the ſame time, into the arteries of the *uterus*; that ſpring from it: which contributes to cauſe, or augment, the diſcharge of the *menſes*. From hence it is eaſy to conclude, from the reverſe of this reaſon, that cold water, into which the feet are put, as it retards the courſe of the blood in the trunk of *the aorta deſcendens*, muſt retard it alſo in the arteries that go from it, to diſtribute themſelves in the *uterus*: which muſt tend to diminiſh, or even to ſtop a flooding.

SECOND CASE.

Moderate actual diſcharge of blood; or dripping of the uterus.

The dripping of the *uterus* may be of two kinds: in the one, this diſorder is the principal diſeaſe; which has begun, and ſtill continues of itſelf: in the other, it is a ſymptomatic diſeaſe; which ſucceeds an hæmorrhage of the *uterus* gradually decreaſed, either by the effect of the medicines, or by the loſs of blood, in conſequence of the continuation of the flooding alone.

In both theſe caſes, it is proper to bleed in the arm, according to exigence of the accidents, and the ſtrength of the patients: but it ſhould be leſs than in the hæmorrhage of the *uterus*; eſpecially in the ſymptomatic *dripping*, where the diſorder is already greatly reduced in degree, by the hæmorrhage which has preceded; and by the bleedings which there has been a neceſſity to make, in order to cure it.

It is proper, in the ſame manner, in both theſe caſes, to purge the patients from time to time; and even to vomit them, if nothing forbid it: particularly

larly in the cases that will be explained below, in speaking of the precautions to be observed in treating this disorder. But there is always more safety, and less inconvenience, in pursuing one or other of these measures in the drippings which are principal, than in those which are symptomatic: because, in the former, the patient has more strength; and there is, moreover, less danger of increasing the discharge than in the latter, where there is always room to dread the re-opening the vessels, that are not well closed. If purging be thought proper, the cathartics may be employed, that are thought most suitable to the strength, and constitution of the patient: but if vomiting seem advisable, it is always best to give the preference to *ipecacuana*, in a moderate, but sufficient dose.

After having employed bleeding, and purging; and, by their means, emptied the vessels, and the *primæ viæ*; it is proper to endeavour to remove the causes, which support the disorder. If it depend on an ulcer, *schirrus*, or cancer of the *uterus*, there should be joined to the remedies proper to these disorders, or at least to the palliatives, some gentle astringents, in order to diminish the loss of blood; and they may be chosen from among those, which are going to be proposed. But if the dripping proceed only from some of the ordinary causes; which may be reduced to three classes; 1°. To the relaxation, and want of due tone of the veinous *appendices*, which do not close as they ought; 2°. To the slight and recent dilaceration of some of the *appendices*; which find a difficulty in reuniting and reclosing; 3°. To the obstruction of the lactiferous vessels; which, not emptying, compress consequently the veins, and maintain a constant dilatation of the veinous *appendices*; it is proper, in such cases, to employ the remedies peculiar to each of these causes, accordingly as they will be displayed in the following articles.

I. In the case, therefore, of relaxation, and want of due tone of the veinous *appendices*, 1°. Recourse should

ſhould be had to aſtringent remedies, capable of reſtoring the elaſticity of thoſe parts, and putting them in a condition to contract themſelves ſufficiently, to be recloſed. As this claſs of medicines is very extenſive, it will be ſufficient to propoſe here the ſeveral articles, that are moſt recommended; and to mark, with an aſteriſk, thoſe which are moſt in uſe: though it will not be vouched, that the preference, which is given, may not be in ſome inſtances the reſult of prejudice, or faſhion.

VEGETABLES.

ROOTS.

* Tormentil, * Biſtort, * Dropwort,	In decoction, in the doſe of, from half an ounce to an ounce.
* Pimpernel, * Strawberry, * Cinqfoil, Herb Robert,	In ſubſtance, reduced to powder, from a ſcruple to two ſcruples.

LEAVES.

* Common knotgraſs, * Plantain, * Yarrow, * Shepherds purſe, Horſetail, Mouſe-ear,	
* Pimpernel, * White nettle, Myrtle,	In ptiſan and decoction, from a quarter of a pint to half a pint.
Cinqfoil, Perivincle, Golden rod, Lungwort, Tender leaves of oak, Winter green, Moneywort, Selfheal, Betony,	The expreſſed juice clarified, from two ounces to four.

FLOWERS.

* Red Provence roſes, * Balauſtines, Flowers of the quince tree,	In decoction, from one ounce to two. In ſubſtance, reduced to powder, from one ſcruple to two.

FRUITS.

Nuts of the cypreſs tree, Galls, Acorns, and their *calyces* or *capſulas*,	In decoction, from one dram to two.
Seed of ſumach, Myrtle berries, Dried rind of pomegranates,	In ſubſtance, from one ſcruple to two.
Freſh rind of green oranges,	The rind of four oranges muſt be boiled in two pints of water, as ptiſan.

JUICES.

Terra Japonica, Maſtic, Dragons blood, *Hypociſtis*, True *Acacia*,	In ſubſtance, from one ſcruple to two.

WOODS.

Sanders, Miſletoe of the oak, Maſtic tree,	Raſped, and in decoction, from half an ounce to an ounce.

BALSAMS.

BALSAMS.

Of *Capivi*, — *Canada*,	Rolled in powdered ſugar, in the doſe of, from four drops to ſix.
* Venice turpentine,	In the doſe of, from one dram to a dram and half.

ANIMALS.

Pearls, * Burnt ivory, * Prepared hartſhorn, * Calcined egg-ſhells, * Cuttle fiſh-bone,	In powder, and in ſubſtance, in the doſe of, from one ſcruple to two ſcruples.

MINERALS.

* *Lapis Hæmatites*, * Bole Armoniac, * Briançon chalk, * *Terra ſigillata*, * Amber, * Granate, * Alum, * Coral [1],	In ſubſtance, reduced to powder, from one ſcruple to two.

[1] After many uncertainties and variations, it is at laſt known, that coral is the production of ſeveral ſmall inſects, or *polypuſſes*, which lie hid in the bark; and ſometimes ſhow themſelves, by opening, like little flowers: which has made them be taken for the flowers of coral; and occaſioned coral's being reckoned in the number of plants.

The opinion, which is received at preſent, is ſupported not only by the reality of the *polypuſſes*, placed by millions in the bark of the coral; but, alſo, by the volatile alkaline ſalt, which the coral, drawn freſh from the ſea, yields in diſtillation; and by the putrid ſcent of fiſh, that the bark contracts, when it is ſuffered to putrefy in water; which, as is evident, evinces the animal origin of coral. I have, however, continued to place the coral in the number of minerals, conformably to uſage.

GALENICAL PREPARATIONS.

* Water of plantain, * —— — ſhepherds purſe, * —— — roſes, * —— — yarrow, —— — horſetail, * —— — common knot-graſs, —— — tender leaves of oak, —— — frogs ſpawn,	In the doſe of one, two, or three ounces.

SYRUPS.

* Syrup of roſes, * —— — myrtle-berries, * —— — red nettles, * —— — yarrow, * —— — plantain, * —— — dead nettle, * —— — quinces, * —— — coral,	In the doſe of an ounce; or an ounce and half.

TROCHES.

Troches of yellow amber, —— — Gordon, —— — *terra Japonica*,	From half a ſcruple to a ſcruple.

CHEMICAL PREPARATIONS.

* Saffron of Mars,	From half a ſcruple, to a ſcruple.
* Tincture of coral, * —— — red roſes, * —— — *terra Japonica*,	From one dram to two.
* Rabel's water,	By drops, *ad gratam aciditatem.*

With

With these different drugs, chosen, and proportioned properly, ptisans may be discretionally made; and apozems, broths, juleps, and potions, composed; or opiates, boluses, and troches. On which head, nothing more is requisite, than to consult what has been already said above, *Chapter IV.* It is often advantageous, without changing the view, or even fundamentally the medicine, to avoid giving the patient a disgust, by varying the form under which they are given.

II. In case of dilaceration of the veinous *appendices*, it is necessary, to insist first on the use of emollients and agglutinants; amongst which, those ought to be preferred, that are somewhat astringent and vulnerary. This is the class of these remedies ranged in their due order, and marked, as was before done, with an asterisk, to distinguish those which are most used.

VEGETABLES.

ROOTS.

* Comfrey, * Water lily, * Yellow mallow, * Sorrel, * Strawberry,	In decoction, in the dose of from one ounce, to an ounce and half.

LEAVES.

* Mullein, * St. John's wort, * Common cudweed, * Ladies mantle, * Sanicle, * Bugle, Lettuce, Purslain, * Avens, Bloody cranes bill, Scabious,	In decoction, in the dose of a handful, or a handful and half.

SEEDS.

* Cold ſeeds, * Lettuce ſeed, Purſlain ſeed,	In emulſion, from two drams to ſix drams, of each kind. In decoction, with a double proportion.

JUICES.

* Gum tragacanth, Gum Arabic, * *Labdanum*, * Myrrh,	In the doſe of ten or twelve grains.

WOODS.

* Maſtic tree,	In decoction, with half an ounce, well raſped, to a pint.

ANIMALS.

* Ivory ſhavings, * Hartſhorn ſhavings,	In decoction, in the proportion of one, or two ounces to a pint. In ſubſtance, reduced to powder, from a ſcruple to two.

SYRUPS.

* Of comfrey, — pomegranates, — ſorrel, — lemons, — verjuice, — gooſeberries,	From one to two ounces.

With theſe drugs may be made, obſerving the ſame precautions, ptiſans, decoctions, apozems, broths, juleps, and potions; or, if it be more liked, troches, powders, boluſſes, opiates, &c. It muſt, however, be remarked,

remarked, that when the vulneraries, and agglutinants, alone, do not act with sufficient power, it is requisite to join to them, some astringents taken from the preceding class.

III. In the third case; that is to say, when it is suspected with relation to the *uterus*, that there are some remains of chloretic obstructions, which hinder the lactiferous vessels from emptying themselves; and, consequently, constrain the circulation of the blood, the aperitives proposed before, in *Chapter VIII*, on the same occasion of the *chlorosis*, must be brought into use. But care must be taken, to select those, which are most gentle; and to employ them only in moderate doses, joined even with some astringents; for fear, otherwise, of increasing the flooding, by the remedies themselves, which are given to cure it.

IV. But if there be signs, that indicate any complication of the causes of the disorder; which is not uncommon; that is to say, any relaxation, together with dilaceration; any dilaceration, together with obstruction; or, what is worse, relaxation, dilaceration, and obstruction, all together, at the same time, in the *uterus*; it is proper, in such cases, to combine, also, in proportion, the remedies peculiar to each particular cause; in order to be able to oppose them all directly; and by that means, to cure effectually the disorder, which could otherwise only be palliated.

V. In all the cases, of which we have been speaking, 1°. all the exterior remedies proposed in the preceding article, as fomentations, cataplasms, injections, pessaries, &c. may be employed; and with the more dependance, because there is less reason to fear, the heat, they communicate to the *uterus*, may augment the flooding, by augmenting the velocity, and the quantity of the blood that passes thither.

2°. Besides these remedies, there is another, which we have not mentioned: thinking it scarcely practicable in uterine hæmorrhages; because it always imparts, whatever precautions may be taken, too much heat to the *uterus*. But it may be brought into use

with ſucceſs in the dripping of the *uterus*. This remedy is fumigation; which may be performed in different manners. The moſt ſimple is vinegar: which may be thrown gradually on a hot ſhovel; or it may be made more compound by red roſes, balauſtines, myrtle-berries, maſtic, amber, *labdanum*, &c. Theſe drugs muſt be reduced to powder; and incorporated with gum tragacanth, diſſolved in roſe, or plantain water, to form them into troches: which are to be put on a hot ſhovel, to raiſe the fumes. Some [1] authors recommend as a ſpecific and approved remedy, the fumes of frogs dried in the ſhade: which are burnt on a hot ſhovel; or that of a mule's hoof, thrown on burning coals.

Theſe fumigations are commonly received through the perforated chair: but as they cannot enter far by this means, it is more advantageous to uſe a funnel to introduce them. It is indeed true, that, in this caſe, the perforated chair muſt be high, the fire very gentle, and a conſiderable diſtance betwixt the fire, and the funnel, to prevent the heat of the fumes from doing any harm.

3°. As the dripping of the *uterus* is leſs dangerous and urgent, than the uterine hæmorrhage; and laſts longer; ſomewhat muſt be relaxed in this caſe, with relation to the article of diet. Not only, therefore, jellies, either of hartſhorn, or calf's foot, may be permitted; but even weak potages; boiled rice in broth; oatmeal; and flower in broth alſo; eggs boiled in the ſhell, or ſtewed with broth; &c; may be allowed. The eating fleſh, only, ſhould be wholly forbid for a long time; and in its place, a little fiſh broiled, or boiled in water, or ſtewed for a ſhort time; and with very little ſalt; ſhould be permitted. The patient ſhould continue to drink proper ptiſans without wine; and take, every evening, a ſlight narcotic, if ſhe find a difficulty in ſleeping without the aſſiſtance of it.

[1] Michael Joannes Paſchalius. *Methodi Curandi, Lib. I. Cap* 55. who ſays he cured, by this means, an uterine diſcharge of blood long ſtanding.

4°. The

4°. The patient may be, alſo, leſs rigorouſly treated, with regard to the article of repoſe: but it is proper, nevertheleſs, to reſtrain them from much exerciſe; and to adviſe them urgently to keep in bed; or at leaſt laid on a couch; without putting themſelves into any agitation, or ſpeaking much. As the effects of joy or grief are equally againſt them, it ſhould be endeavoured, to keep them free from thoſe paſſions; and they ſhould be alſo forbid all uſe of coition.

By theſe different means, either the diſorder will be diminiſhed to ſuch a degree, as to leave only a little lymphatic running, that is white, or of the colour of the waſhings of fiſh; that is to ſay, there will nothing remain but a *fluor albus*; on which the following chapter may be conſulted; or even it may be intirely and radically cured; ſo that nothing more may remain to be done, but to prevent a return of it; which falls under the third caſe, that we are now going to explain.

THIRD CASE.

Method of preventing the return of floodings.

1°. It is proper to take care to keep off every thing, which may renew the flooding; and in order to this, to perſiſt in making the patients obſerve a regular conduct; to oblige them to go to bed early; and to lie a long time in it; to exhort them to reſtrain their paſſions, and not relax on the article of lying ſeparately from their huſbands; and to forbid for a long time the uſe of fleſh, more than once a day; and then only white meats boiled or roaſted. With reſpect to wine, a little may be granted, if the ſtomach require it: but this liberty muſt not extend very far.

2°. To theſe precautions, which make the principal part of the prophylactic cure, muſt be joined the uſe of the medicines, that had the beſt ſucceſs in overcoming the cauſe of the diſorder: but as this cauſe muſt be very much weakned, ſuppoſing it not intirely deſtroyed;

deſtroyed; theſe medicines ſhould only be employed at long intervals, and in very moderate doſes. Attention ſhould, alſo, be given, to chuſe thoſe preferably, which are the moſt gentle.

3°. In the caſe, therefore, of the *inertia*, and relaxation of the veinous *appendices*, ſlight aſtringents ſhould be given, in form of a ptiſan, depurated juices, or boluſſes, of which, by intervals, a long uſe ſhould be made, till the ordinary courſe of the *menſes* be perfectly reſtored, without the renewal of the flooding. Sometimes nothing ſucceeds better in this caſe, than a common uſe, in form of ptiſan, of a ſlight decoction of the China root, alone; or of that, and ſarſaparilla.

4°. In the ſame manner, in the caſes of dilaceration of the veinous *appendices*, the frequent uſe of emollients, and agglutinants, ſhould be perſiſted in; and, with this view, beſides the remedies that have been already propoſed, chicken broth, with the cold ſeeds, or broths of frogs, or ſnails, &c. ſhould be given; intermixing with them, from time to time, the uſe of vulneraries; ſuch as balſam of Capivi, or of Canada, mixt with the butter of the *cacao*, or *ſperma cæti*.

5°. The uſe of gentle aperitives may, in like manner, be from time to time repeated, in caſes of obſtructions of the lactiferous veſſels; and as it is of conſequence, that theſe aperitives ſhould not be too powerful, bitter broths may be taken; in which are diſſolved, fifteen or twenty grains of chalybeated ſoluble tartar; or from twenty to twenty-five grains of *terra foliata tartari*, or clarified whey; in which ſome bitter plants have been infuſed; or the ſame remedies may be added, in the ſame proportions.

6°. In every caſe, the ferruginous mineral waters agree equally well; and they may be preſcribed with ſucceſs in the proper ſeaſon. But thoſe muſt be choſen, which are not purgative, or but in a ſmall degree; and contain only a moderate quantity of the particles of iron. Such are thoſe of Forges; by which,

as

as a ſpecimen, the choice may be regulated. If there be none within reach, but ſuch as are more purgative, or too much charged with the mineral ſubſtance, they may, nevertheleſs, be uſed, being diluted with a ſufficient quantity of common water.

7°. The uſe of milk is ſuitable, alſo, to all the three caſes: but with ſome difference. When it is in queſtion to ſtrengthen the veſſels that are too much relaxed, the preference is due to goats milk; and, according to ſeveral authors, to that of ſheep; provided the ſtomach can digeſt it. Aſſes milk ſhould be employed, when it is propoſed to ſweeten the blood; to thin the milky humours; and to relax the lactiferous veſſels of the *uterus*, too much cloſed, or half ſtopped up. That of cows may be ordered, diluted with a ſlight infuſion of vulneraries, when it is wanted to conſolidate the *cicatrices* which are too tender, and diſpoſed to open again: but aſſes milk may then be employed with the ſame ſucceſs.

8°. Laſtly, in all theſe different caſes, uſe may be made of fumigations; taking care, that the fumes may not be too warm on their entering. As the only end of theſe fumes is to ſtrengthen the elaſticity of the veinous *appendices*, together with that of the inferior membrane of the *uterus*, troches compoſed of frankincenſe, maſtic, *labdanum*, amber, red roſes, balauſtines, &c; or at leaſt two or three of theſe drugs, reduced to powder, tempered with plantain water, in which a little gum tragacanth is diſſolved, and worked to the proper form; may be employed.

Neceſſary precautions in the cure of floodings.

I. As the intention of cure, which urges moſt in copious floodings, is to moderate the diſcharge, the remedies, on which moſt ſtreſs ought to be laid; and which ſhould be regarded as the moſt efficacious; are bleeding; aſtringent ptiſans, with the roots of biſtort, and comfrey, the rind of green oranges, &c; the decoctions of crude *terra Japonica*; the depurated

juices of aſtringent plants, as the white nettle, yarrow, and plantain; and boluſſes with the aſtringent powders; and particularly with dragons blood, roch alum, and brown ſugar, in the proportion of fifteen grains of each, for every doſe, which muſt be repeated from four hours to four hours.

II. The ſame remedies are proper, alſo, in the too copious diſcharge of the *menſes*: but as the danger is not generally ſo great then, there is no occaſion to hurry in the uſe of theſe remedies with the ſame briſkneſs; nor to give them in ſuch large doſes.

III. As the danger is ſtill leſs urgent in the dripping of the *uterus*, there is yet leſs reaſon, in that caſe, to urge too faſt the uſe of thoſe remedies. It is often prudent to wait the courſe of nature, in order to judge with accuracy of the ſtate of the diſorder, and to proportion the remedies to it.

IV. In general, if it be proper to check the copiouſneſs of the flooding quickly, becauſe it is never wholly void of danger, it is proper to be equally ſollicitous not to ſtop them too ſoon. By ſuch a conduct, the patient would be thrown into violent hyſterical ſuffocations; and what is worſe, the hazard even of having an inflammation of the *uterus*, or a *ſchirrus* brought on; which ought to furniſh objections againſt the too great uſe of aſtringents; and deter a prudent phyſician from truſting them too far.

V. It may be judged from thence, that the patients feet ſhould not be put into cold water; nor aſtringent peſſaries, nor injections employed; but in very urgent caſes; and even then, not without great circumſpection; ſince too quick an effect might be more to be dreaded than the diſeaſe itſelf.

VI. The ſame judgment may be made on Rabel's water, added to ptiſans, or potions: although, to ſay the truth, it is rare, that the moderate uſe of this water ever operates by a too quick ſuppreſſion; or produces any dangerous change.

VII. It is already intimated, that nothing ſhould be applied on the belly, yet leſs introduced into the

uterus,

uterus, that may be too hot: becauſe the heat attracts the blood to the *uterus*, for the reaſons which have been mentioned: but it ſhould be avoided, with the ſame care, to apply any thing cold, which may fix the blood there; and cauſe a dangerous repletion in the part.

VIII. Some moderns have had the raſhneſs to recommend, in floodings, preparations of lead; ſuch as the ſugar, the magiſtery, and the *liquor Saturni*; not only in injections of the *uterus*, which may perhaps be tolerated in ſmall doſes; but even in the remedies that are to be taken internally; which muſt be ever condemned; and never imitated. The judgment given by Dr. Boerhave, a very able phyſician, and chemiſt, and conſequently a more weighty authority, in this point, ſhould be adopted: he ſays, [1] *Saccharum Saturni, internè commendatur pro remedio ſalubri contra hæmoptoen, hæmorrhagiam, mictum ſanguinis, gonorrhœas, fluores albos, & ſimilia, tùm etiam pro mitificante remedio contra acria ſanguinis; ſed nunquam auſus fui facere periculum, quia felices ſucceſſus haud vidi ab aliis adhibentibus natos, & quoniam novi vix doloſius haberi, tetrumque magis venenum, quàm ab hoc plumbo ſtatim in ceruſſam redituro, ac acidum ab occurrente quacunque re inde abſorbetur: hinc lethale, nec facilè poſtea ſanandum venenum corpori inducitur.*

IX. The moſt embarraſſing article in the cure of floodings is what regards the uſe of purgatives, and emetics. Theſe remedies are recommended by [2] all practitioners, and they are ſometimes followed with an amazing ſucceſs. But unhappily, on one hand, this ſucceſs is never certain; and, on the other, it is almoſt always certain, that the actual operation of theſe remedies will increaſe the diſeaſe, without there being any means by which it may be foreſeen, to what degree it may be. I am not ſurprized, there ſhould be ſome difficulty in determining, in theſe circum-

[1] Chimiæ, *Tom. II. Proceſſu* 173. *in Scholio.*

[2] Hippocrates, *Lib. II. de Morbis Mulier.* and after him by almoſt all others who have written on the diſeaſes of women.

ſtances,

ſtances, *judicium difficile.* They are maſterly ſtrokes which a phyſician can only gain by long experience; and all the lights, I can give, are confined to the following reflections.

X. It is evident, 1°. That neither vomitings, nor purgings, can ever be proper in floodings, but when ſuch floodings are promoted by ſome crudities in the ſtomach, or inteſtines. 2°. That theſe crudities can only promote the flooding in one of theſe three manners; either by occaſioning the return of a fever fit, which accelerates the motion of the blood; by thickning the blood in regular periods, which augments the repletion in the *uterus:* or by contractions, or periodical gripes in the inteſtines; which draws the *uterus* itſelf into ſimilar contractions. It reſults from thence, that purging, and vomiting, ſhould never be employed in floodings, 1°. But when there is, in the ſtomach, or inteſtines, a maſs of crudities, evinced by *nauſeas*, gripes, looſeneſs, and vomiting; or preſumed from the knowledge of the bad regimen of the patient, before the preſent attack of the diſorder. 2°. But when the flooding appears to be periodically renewed with a diſtinct fever fit; or with a ſhivering and periodical concentration of the pulſe; or at leaſt gripes, and cholics, which return regularly.

XI. It appears, therefore, already, that the uſe of cathartics, and emetics, is limited in floodings: but there is ſtill a farther reaſon of limitations; which is, that prudence demands two other attendant circumſtances, in order that theſe remedies may be employed with ſafety. *The one*, that the veſſels ſhould be ſufficiently emptied by bleeding; in order to the being ſecure againſt the too great irruption, the operation of theſe medicines may occaſion. *The other*, that there ſhould not be in the *uterus*, either pain or actual tenſion; in order to be ſecure againſt the inflammation, there may be reaſon to apprehend in the oppoſite circumſtances.

XII. In

XII. In the concurrence even of all these circumstances, it should not be flatteringly presumed: that the use of purgatives, and emetics, has always the same degree of safety. In general, they may be employed, with more dependance on them, in simple drippings of the *uterus*, than in uterine hæmorrhages; because there is less to be feared from the irruption of blood into the vessels of the *uterus* in the dripping; which is principal, than in that which is symptomatic, as the patients, being less reduced in strength, are in a better state to support the irruption if any happen; and, in the floodings without solution of continuity in the vessels of the *uterus*, than in those where there is a solution; as the vessels of the *uterus*, when they are intire, resist better the irruption of blood.

XIII. When the question on the utility of purging, and vomiting, in floodings is decided: what remains to be done, is not very difficult. It is, always, right to prefer vomiting, so long as any crudities remain in the stomach; particularly if the patient vomit without much trouble. It is proper, on the contrary, to employ purges, after the crudities are passed into the intestines; and sometimes even before they have passed; when it is known, that a vomit cannot operate on the patient without exciting very great efforts.

XIV. Purgatives, that are gentle, but proportioned to the constitutions of the patient, should be chosen. The best method commonly, is to give the dose at several times, that it may work with the greater safety, and gentleness. With regard to emetics, it is always right to prefer *ipecacuana* in powder, in the dose of twenty, twenty-four, or thirty grains, to the tartar emetic, and other antimonial vomits: because the *ipecacuana* acts with less impetuosity; dissolves, and loosens, better the *mucus* of the stomach; and operates by stool, also, a little more than the tartar emetic.

Remedies recommended in floodings; which may be used with success; or, at least, without danger.

Although the class of astringents, and agglutinants, which we have enumerated, may afford a great number of different remedies, capable of effecting all the intentions of cure, it does not seem right, to suppress some others, of a particular nature, which may be employed with success; or at least without danger. Such are:

I. Roch alum, proposed by Mr. Adrian Helvetius [1], as a specific for all hæmorrhages; and, consequently, for floodings in women. He melted two ounces of selected roch alum, in a silver spoon: put to it, when liquefied, half an ounce of powdered dragons blood: and, before the mass grew hard, formed it into pills of the size of a pea.

When the flooding was not very copious, he gave, from four hours to four hours, half a dram of these pills, in a spoonful of syrup of quinces: but he gave two scruples, and even a dram, in each dose; when the disorder was urgent; making the patient drink after it, some ptisan of dog grass, or some infusion of maiden hair.

Mr. Helvetius boasts much of the efficacy of this medicine: which, indeed, commonly succeeds well enough; and sometimes even over well, by causing a suppression, that is too quick, and of course subject to bad consequences. In general, the quantity of alum, the patients are made to swallow, gives great pains in the stomach; and throws them into continual languors of that part. It moreover binds the belly likewise to such a degree, that it becomes unavoidable, in going to stool, whatever care may be taken by giving glysters, to make such efforts, as must promote the flooding.

At present Mr. Helvetius's remedy is out of use. It is now thought sufficient to give the patient, from four to four hours, when the disease urges; or twice a

[1] *Traité des Pertes de sang.* Paris, 1697. in-8°.

day,

day, only, when it is ſlight; a bolus compoſed of roch alum, dragons blood, and brown ſugar; all powdered and incorporated by ſome drops of a ſolution of gum tragacanth: and this method of adminiſtering alum is ſubject to fewer inconveniencies.

II. The eſſence of Rabel, of which the preparation is preſcribed in the *Pharmacopeia of Paris.* This remedy is one of the moſt ſafe and efficacious, that can be employed: beſides the advantage of being able to regulate its action at diſcretion.

The moſt common manner of uſing it, is to pour fifty-ſix or fifty-ſeven drops into a quart, or two pounds of decoction, of the roots of comfrey, *ad gratam aciditatem*, to which is added, an ounce, or an ounce and half, of ſyrup of pomegranate, or gooſeberries; or even of capillair; to make a kind of limonade, which is not diſagreeable.

A glaſs of five or ſix ounces is given, from four hours to four hours, when the flooding is conſiderable. But, if it be moderate, the medicine is only given two or three times a day; or even not more than once, when the flooding is only a ſimple dripping.

This remedy is as efficacious, as the preceding, without diſordering, or conſtipating the ſtomach. If Rabel's eſſence cannot be obtained, the dulcified ſpirit of vitriol may be ſubſtituted, with the ſame effect: by putting it, drop by drop, into the decoction of the roots of comfrey, *ad gratam aciditatem:* and by adding any ſyrup, that may be thought proper.

III. The [1] expreſſed juice of the dung of an aſs [2], or hog, well clarified; and given three times a day, in the doſe of four drams each time, mixt with an equal quantity of ſyrup of coral, red roſes, or myrtle-berries; and aromatiſed with a ſpoonful of orange flower water. There is ſometimes added, to dilute it,

[1] Roderic. à Caſtro, *De Morb. Mulier. Lib. I. Cap.* 5. & alii paſſim.

[2] Johannes Schmidt. *Ephemerid. Medico-Phyſicar. Decur. I. ann.* IX. & X. *Obſervat.* 56.

an ounce of plantain water; or of some other such kind. Sometimes even a syrup is made of this juice, which is ordered in the dose of an ounce. This dung is employed, also, in cataplasms on the *hypogastrium*.

IV. The [1] root of dropwort, [2] the bark of the root of white mulberries, [3] eggshell calcined, [4] and the dried skin of a goose's foot, are all recommended as specifics, each in the dose of a dram, powdered very finely, and diluted in an ounce or two of any proper water; or of the expressed juice of some astringent plant.

V. The yolk of a fresh egg swallowed crude, with a spoonful of red wine, or distilled plantain water. As this remedy is very gentle, it may be given several days together, in the morning fasting; and it may be of service in the drippings of the *uterus*.

VI. Gum [5] Arabic, in the dose of a dram, dissolved in an ounce of plantain water; and taken, in the morning fasting, several days together. This remedy, in the same manner as the preceding, is of the class of agglutinants; and proper in drippings caused by any slight erosion in the *uterus*.

VII. The [6] flowers of the walnut-tree, gathered when they begin to fall of themselves, dried in the shade; reduced to powder; and given in the weight of a dram, in some spoonfuls of red wine; which should be repeated for some days.

VIII. The remedy boasted by [7] Forestus, as an admirable secret, which he had from an able practitioner of Boulogne, called Helideus, who had been his master.

[1] Mercatus, *De Morb. Mulier. Lib. I. Cap.* 8.
[2] Idem, *Ibid.*
[3] Riverius, *Cent. IV. Obs.* 86. Raimundus Fortis, *in Consult. & Respons. Medic.*
[4] Joh. Hartmannus, *in Praxi Chymiatricâ.* Raim. Fortis, *ubi suprà.*
[5] Mercatus, *ubi suprà.*
[6] Solenander, *in Consil. Medicinal.*
[7] Observat. *Lib. XXVIII. Observat.* 12.

A turtle

A turtle dove, moderately fat, muſt be procured: and after being pluckt, and drawn, it muſt be waſhed with red wine, and roſe water, its belly filled with an ounce of maſtic, groſsly bruiſed; and the ſkin then ſowed cloſe again. Let it be afterwards ſpitted; and roaſted; during which, inſtead of butter, let it be baſted with vinegar of roſes. The fat, which runs from it, muſt be carefully ſaved; and when the dove is well roaſted, being put into a new earthen pot, well glazed, and with a cover luted carefully over, it muſt be ſet in an oven, till the bird be wholly dried; and in that ſtate it muſt be reduced to powder.

Foreſtus adviſes to give, ſeveral days together, a ſpoonful of this powder, in plantain water; or in any aſtringent decoction: and to rub the patient on the loins, *pubis*, groins, &c. with the fat that is ſaved in the roaſting. If this medicine were as efficacious as the author pretends, the virtues ought to be principally attributed to the maſtic; and the preparation would either add nothing to it, or but little.

IX. The following decoction, propoſed by [1] Septalius, as a certain remedy; and as a ſecret a long time concealed.

The rinds of three four oranges, a little green, are taken, cut into thin ſlices, and boiled in ſeven pounds of water, to the conſumption of two thirds. The decoction, which remains, is ſtrained; and eight, or nine ounces of it, is given to be drunk every morning as long as it laſts. Septalius intimates, that this decoction may be rendered more efficacious, by boiling in it, towards the end, a handful of mouſe-ear; and to a yet greater degree, by quenching in it, ſeveral times, a red-hot bar of iron. He adds, that this medicine is ſovereign in the floodings of women; unleſs when they proceed from any exulceration.

X. The kind of cataplaſm, or topical application, that [2] Solenander has commended as a remedy capable of ſtopping, even the firſt day of its uſe, the moſt pro-

[1] *Animadv. & Caut. Lib. VII.* [2] *In Conſil. Medic. Cauſ.* 145.

fuſe and obſtinate floodings: and which has had the approbation of [1] Riviere, [2] Ettmuller, and many other [3] authors. This is the compoſition of it.

Take of the plaſter of Paris reduced to powder, one pound; of gum Arabic torrified, and powdered in the ſame manner, ten drams; and five or ſix ounces of eggs well beaten, and reduced to a fluid ſtate. Mix and temper the whole together, and ſpread it immediately on pledgets of cotton, or pieces of linnen: which muſt be applied, very near each other, on the navel, and the loins.

I do not take upon myſelf to vouch for all the efficacy, that has been attributed to this medicine: but as it is a remedy intirely external, of which the uſe appears to be wholly exempt from danger; and ſuch as there may be occaſion for, in uterine hæmorrhages, I thought it ought not to be omitted.

XI. I have ſeen employed, in exceſſive *menſes* and floodings, the *calx* of tin, taken internally, in a little conſerve of roſes, in the form of a bolus, for ſome days, in the morning faſting; the doſe being from ten to fifteen, and eighteen grains. The remedy does not haraſs the ſtomach as common aſtringents: becauſe it has not the ſame ſtiptic quality; and, nevertheleſs, it is pretended, the action is more certain than that of aſtringents, without its ever being perceived, *as they aſſure me*, to produce any bad effect.

The ſame remedy is adviſed for hyſterical vapours, and I reſerve to myſelf the right of ſaying, in ſpeaking of this diſeaſe, what I think of ſuch a medicine, as well of all other preparations of tin, that are recommended.

Remedies recommended by ſome authors, but of little efficacy; and often even not ſafe.

I. Nothing is better authorized among the antients, than the application of large cupping-glaſſes under

[1] *Praxeos Medicæ, Lib. XV. Cap.* 3.
[2] *De Morb. Mulier. Cap.* 1.
[3] Timæus von Guldenklée, *Lib. IV. Cap.* 5.

the breasts. Hippocrates has said, in express terms; [1] *Mulieri si placet menstrua sistere, cucurbitulam quam magnam ad mammas appone:* and [2] Galen has applauded what Hippocrates asserted on this article. Nevertheless, this remedy is at present wholly out of use. I am ignorant, whether or no, it was attended with any success; but I am persuaded, that bleeding in the arm is much better.

II. [3] Forestus, [4] Mayerne, [5] and Hartman, recommend the use of human bones, calcined, according to Mayerne, to whiteness, diluted in the proportion of a dram, in a glass of red wine; or of the depurated juice of plantain. Besides the repugnance there may be to the taking such a medicine, the ashes of human bones, calcined to this degree, appears to me to be more aperitive than astringent.

III. [6] Francis Feynes, an antient professor of the faculty of Montpelier, proposes to absorb tar in a sponge; and to calcine it afterwards, in a pot, in order to powder it. He adds, that this powder, diluted in the proportion of twelve, or fifteen grains, in a sufficient quantity of the juice of plantain, cures floodings; whether it be taken internally, in little doses; or employed as an injection, into the *uterus*. But this powder is diuretic: which is sufficient to make it be regarded as an emmenagogue; and, consequently, by no means suitable to the use for which it is proposed.

The same nearly may be said of the colophony, which [7] Solenander advises to give in floodings, in the dose of a dram, reduced to powder, and diluted with a glass of plantain juice. He assures us, that, at the fourth dose, the patient would be certainly cured. *Id fiat quater*, says he, *& erit curata infallenter, Deo dante.*

[1] *Sect. V. Aphor.* 50.
[2] In Comment. *in hunc Aphor.*
[3] Observat. *Lib. XXVIII. Observ.* 10.
[4] *Prax. Medic. Lib. III.*
[5] *In Praxi Chymiatricâ.*
[6] Practic. Medicin. *Lib. IV. Cap.* 58.
[7] *In Consiliis Medicinalibus.*

IV. Riviere [1], another professor of the faculty of Montpelier, asserts positively, that spikenard, reduced to powder very finely, and taken in any proper fluid in the weight of a dram, stops floodings; and it appears, by observation XXXII, *cent.* II. that he applied it to this use, by mixing it with other astringents. I know but few practitioners so intelligent as Riviere: but, nevertheless, I cannot avoid suspending my assent to his decision. The aromatic smell, and taste of spikenard, evince, that this remedy is attenuant, and aperitive; which are, moreover, the qualities that all authors ascribe to it: and some even add, that it is emmenagogue; and propose it for exciting the *menses*.

V. I cannot approve of the use of the *tinctura anti-phthisica*, of Ettmuller; which this author [2] proposes for floodings, in the doses of twelve, fifteen, and eighteen drops, in a suitable vehicle. The composition [3] of this tincture is,

℞ *Sacchari Saturnini, & vitrioli Martis*, āā ʒj.
Spiritûs vini rectificati, ʒviij.
Repone in loco frigido, donec rubescat spiritus.

It suffices, that the sugar of lead enters into the composition of this medicine, to deter all physicians from ever employing it internally, by whatever suffrage it may be authorized. What has been already said above, *page* 253, on the use of preparations of lead, may be seen on this head.

VI. There is less danger in using the powder of frogs spawn of [4] Crollius, which is going to be mentioned: but I question, whether it really be as efficacious as pretended.

℞ *Myrrhæ electæ & Thuris masculi*, āā ʒij.
Croci triti, ʒß.
Terantur & misceantur omnia.

[1] *Praxeos Medicæ, Lib. XV. Cap.* 3.
[2] *De Morb. Mulier. Cap.* 1.
[3] Vid. Ettmullerum *in Comment. in Schrod. & in Mercelli Method. Cap.* de Tincturis.
[4] *In Basilicâ Chymicâ.*

Pulvis

Pulvis ex aquâ ſpermatis ranarum per ſaccum reſolutâ imbibatur vigeſies vel trigeſies, ita tamen ut ſemper priùs exſiccetur

Tandem adde Camphoræ, ʒiij.

Pulvis ſervetur ad uſum, cujus doſis ad gr. ij. vel iij. *in aquâ Artemiſiæ vel in vehiculo quovis idoneo.*

By the meer reading of this formula, it is eaſy to judge, that the frankincenſe, and the Oriental ſaffron, which are emmenagogues, and the camphor, which is a powerful attenuant, are but ill choſen to make a medicine deſigned to ſtop floodings. I believe, therefore, this medicine, not only to be of no uſe, but even hurtful; and if it be not apparently ſo, it is becauſe only moderate doſes are given.

VII. A [1] German phyſician boaſts the powder of emeralds, taken internally in the doſe of eight grains, as a remedy, which he has ſeen ſucceed in floodings that were deſperate. I have ſeen the powder of turquoiſes propoſed in the ſame caſe, in the doſe of fifteen, or eighteen grains. But I miſtruſt too much the qualities of copper, which is believed to enter into the compoſition of emeralds; and I have not ſufficient faith in the virtue of [2] calcined bones, which form the turquoiſes; to reckon on the efficacy of theſe ſorts of remedies.

VIII. I lay ſomewhat more ſtreſs on the *uſnea* [3], or moſs of a human ſkull, taken internally, in the doſe of

[1] Daniel Crugerus, *in Ephemer. Curioſ. Natur. German. Dec. II. Ann.* 5. *Obſerv.* 25.

[2] Peter Borel, a phyſician at Caſtres, and member of the Academy of Sciences, was, as far as I know, the firſt, who has ſaid, and proved; which he did in 1684; that turquoiſes were petrified, and calcined bones. See *Antiquités de la Ville de Caſtres, Lib. II. Chap.* 12. And the *Deſcription of the Cabinet of the Author*, at the end of the ſame book. M. de Reaumur has proved the ſame ſince. See the *Memoirs of the Academy of Sciences, in the year* 1715, *page* 174.

[3] In Arabia all ſorts of moſs is called *uſnea*. *See* Matthiolus, *Commentaria in Dioſcorid. Cap.* 20. and Dodonée, *Stirp. Hiſtor. Pempt.* 3. *Lib.* 5. *Cap.* 13. But this word does not, at preſent, ſignify among us any but that kind of moſs, which is ſometimes found on the bones and ſkulls of men, that have continued

of a ſcruple: but I have not, however, near ſo good an opinion of it, as a German [1] phyſician who propoſed it as an infallible remedy in floodings, and who gave it a place in the compoſition of the following pills:

℞ *Uſneæ pulveriſatæ, & Eboris foſſilis ſeu Corallorum, cum ſpermate ranarum recenter collecto præparatorum,* āā ℈j.

Opii correcti, gr. j.

Cum ſyrupo idoneo f. Pilulæ parvæ foliato auro obductæ, quæ alternis diebus cum emulſione aquâ ex ſeminibus quatuor frigidis cum aquâ ſpermatis ranarum priùs recenter paratâ, circa cubitum ſumantur.

The ſame phyſician propoſes another powder with *uſnea*, the dung of a horſe, and the powder of frogs ſpawn, pulveriſed, and mixt in equal proportions; with which he directs locks of wool or cotton, dipt in a ſolution of gum tragacanth, to be ſprinkled; and to be introduced in the form of peſſaries: and this topical application may be of ſome uſe.

IX. I conſider, as the effects of the ſuperſtition, and credulity which reign yet in medicine, the practices, which ſome phyſicians recommend [2] of making women, who have floodings, touch a dead body; carry under their [3] arm-pits, or on the region of the heart, a dried toad; [4] ſwallow, in the yolk of an egg, five or ſix grains of their own blood, which they have diſcharged, after having dried it over the fire in an iron ſpoon [5]; take nine turds of a large rat, after having ſilvered or gilt them in form of pills [6]; put on a ſhirt or

tinned a long time in water, the grave, or the ſun, and become ſufficiently ſoftened, or capable of being penetrated by the duſt, to be able to furniſh nouriſhment for the moſs.

[1] Martin. Bernhard. à Bernitz, *in Ephemer. Curioſ. Natur. Germ. Decur. I. Ann.* 2. *Obſerv.* 53.

[2] Vitus Riedlinus, *Lin. Medic. Ann.* 5. *Febr. Obſ.* 20.

[3] Daniel Crugerus, *ubi ſuprà.* Ephem. Curioſ. Natur. Germ. *Decur. I. Ann.* VI. & VII. *in Append. Tit.* 2. *Faſcic.* 2. *Medicam. Cnoſſelianorum.*

[4] Joh. Hartman. *in Praxi Chymiatricâ.*

[5] Raimundus Joh. Fortis, *in Conſult. & Reſp. Medicis.*

[6] Ettmuller, *de Morbis Mulier. Cap.* 1.

Johannes-

or ſhift worn for a long time before by a man; [1] bind their body with the *muſcus terreſtris repens* of Matthiolus, or *muſcus terreſtris clavatus C. B. pen* 300; or with the [2] bruiſed leaves of the *helleboraſtum*, or of the true hellebore [3]; &c. I fancy it may be proper to add the making them ſwallow, in the yolk of an egg, or a glaſs of wine, a dram of crimſon ſilk cut ſmall; for although the dye of crimſon ſilk, particularly if it be produced by the kermes, may have ſome effect in this laſt caſe; and that in the three or four firſt, the horror that is cauſed by touching a dead man, or carrying about them a toad, or ſwallowing their own blood, or the dung of a rat, may diminiſh the copiouſneſs of the flooding, by leſſening the motion of the blood; yet I can ſcarcely perſuade myſelf, that they ever ſaw any real and very permanent effect from the uſe of theſe kinds of practices.

CHAP. X.

Of the fluor albus.

§. I. Description and Differences.

BESIDES the flooding of blood, of which we have ſpoken, women are ſubject to another kind of diſcharge of an humour, that is milky, white, or purely lymphous. This diſcharge is ſometimes copious, and ſometimes moderate: ſometimes continual,

Johannes-Frederic Helvetius, *in Diribitorio Medico, pag.* 117. This author carries his credulity ſo far as to believe, that the *menſes* are ſuppreſt by this practice. *Sed metuendum*, ſays he, *ne exinde in tantum ſupprimantur menſes, ut numquam amplius in poſterum fluant.*

[1] Martin. Bernhard. à Beinitz, *Ephem. Curioſ. Natur. Germ. Decur. I. Ann.* 2. *Obſ.* 52.

[2] Renealmus, *Obſerv.* 21.

[3] Johann. Hartman, *in Praxi Chymiatricâ.*

Ettmuller, *de Morbis Mulierum, Cap.* 1.

[4] Ephem. Curioſ. Germ. *Decur. III. Ann. IX. & X. Obſerv.* 235.

and

and ſometimes liable to intermiſſions. It is called in Latin, *fluxus muliebris*, or *fluor albus:* and in Engliſh vulgarly whites; or frequently a weakneſs.

This kind of diſcharge is rare in girls: but there are inſtances of it, eſpecially in thoſe who have the *chloroſis* a long time. It is more common in women, who have been ſeveral times delivered; who have ſuffered hard labours; or who have had miſcarriages. Moreover, it is common in old women who have bad health: or who give into an improper regimen.

This diſeaſe may happen equally either with, or without a ſuppreſſion of the *menſes:* and it may be, in each of the two caſes, either conſtant, or ſubject to intermiſſions.

The *fluor albus* that is intermittent, and happens without any ſuppreſſion, begins commonly ſome days before the eruption of the *menſes*; increaſes in proportion as the eruption approaches; continues certainly as long as the *menſes* flow, though the diſcharge of them prevents it from being diſtinguiſhable; reappears when the diſcharge of the *menſes* ceaſes, as copiouſly as when they began; continues yet for ſome days; and finiſhes its period at laſt in ten, twelve, fifteen, or eighteen days, more or leſs in different ſubjects, to return again at the ſtated time in due order.

The greateſt part of the diſcharges of the *fluor albus*, which are conſtant, increaſe at the approach of the *menſes*, in the women, in whom they have not ceaſed; continue according to the appearances in this ſtate, as long as the *menſes* laſt, though it cannot be diſtinguiſhed; and ſupport themſelves nearly on the ſame footing, yet ſome days after the *menſes* are ceaſed. But at laſt they diminiſh gradually, in proportion as they recede from the time of the *menſes*, without ever ceaſing, intirely; and begin to augment anew in the ſame order, in proportion as they approach to the time of the *menſes*.

When the *fluor albus* is intermittent; and there is a ſuppreſſion of the *menſes*, the returns generally follow regularly the period of the *menſes*, of which they

ſeem

ſeem to hold the place; and the duration, even of theſe returns, agrees with that of the *menſes*, although they are commonly ſomewhat longer.

Moreover, in ſuppreſſions of the *menſes*, the *fluor albus*, however conſtant it may be, is almoſt always ſubject to variations, and augmentations; of which the period and duration anſwer at ſome times to thoſe of the *menſes*, which are wanting: but of which, nevertheleſs, the returns do not keep at other times any periodical order: as is obſerved, alſo, ſometimes, in like manner, in the returns of the intermittent *fluor albus*, that happen in the ſuppreſſions of the *menſes*.

Theſe are all ſo many different kinds of *fluor albus*; ſome with *ſuppreſſions* of the *menſes*; and others without *ſuppreſſions*: ſome *conſtant*; and others ſubject to *intermiſſions*: ſome intermittent, with *periodical returns*; and others intermittent, without any *regularity in the returns*. But this is not all, many other differences muſt yet be diſtinguiſhed in this diſeaſe; of which ſome are taken from the nature, others from the colour, and others yet from the quality of the humour diſcharged.

1°. *From the nature of the humour*: for according as this humour is ſerous, clear, and purely lymphous; or white, thick or milky; the *fluor albus* is diſtinguiſhed into *lymphous*, and *milky*. This laſt kind includes two others, which, however, ſcarcely differ in any thing but in degree: the one when the humour reſembles milk, in whiteneſs, conſiſtence and opacity: the other, when it is like whey, badly clarified; that is to ſay, clear, leſs white, and more tranſparent, than in the firſt caſe: the laſt, in ſhort, is, when it is tranſparent, mucilaginous, and thick, as water gruel.

2°. *Of the colour of the humour*; which conſtitutes different kinds of *fluor albus*, according as the humour is white; brown; grey; yellow; green; or reddiſh, as water in which fleſh is waſhed.

3°. *From the quality of the humour*; according to which, three kinds of *fluor albus* are diſtinguiſhed: one, which is without ſmell, and acrimony: another, which

which is acrid, and corrosive: and a third, which has a strong and sometimes fœtid smell.

§. II. CAUSES.

The difference we have remarked in the nature of the humour, is sufficient to constitute two kinds of *fluor albus*, totally different from each other. The MILKY *fluor albus*; and the LYMPHOUS *fluor albus*. In the MILKY *fluor albus*, the milky juice, which is separated in the lactiferous vessels of the *uterus*, is to be distinguished: and in the lymphous *fluor albus*, the common pure lymph, such as circulates in the lymphatic veins of the *uterus*: from whence it is easy to conclude: 1°. That the milky *fluor albus* proceeds from the milky juice of the *uterus*: which, instead of being collected in its vessels, in order to be discharged only in the time of the eruption of the *menses*, escapes drop by drop into the cavity of the *uterus*; and flows from thence in proportion. 2°. That the lymphous *fluor albus* proceeds from the simple lymph, which escapes from its proper vessels, passes into the *uterus*, and runs out of it again, in proportion as it passes in. These are, therefore, two diseases, which are really distinct; although they are too often confounded: and they should consequently be treated of separately.

Causes of the milky fluor albus.

The milky juice, that is separated in the lactiferous vessels of the *uterus*; and should be accumulated there for a whole month, in order to procure the eruption of the *menses*; and which should, in its natural state, be discharged only during the time of this eruption; and, by this regulated order, serve to maintain their due period, as has been above explained in *Chapter I*; can flow out drop by drop from its own vessels, and produce, by that means, the milky *fluor albus*, only from one of these three causes: 1°. Because it is too copious, and cannot be contained in its own vessels, of which it, therefore, forces the orifices: 2°. Because

it

it is too fluid, and steals a passage through the orifices of its vessels, though duly closed: 3°. Because the orifices of its vessels are too open, or too easy to be opened; and suffer it to escape too readily. But let us examine these three causes particularly.

I. The milky juice is too copious in the vessels of the *uterus*, and to such a degree, as to force their orifices, from the want of room in them to contain it, in the following cases, where it is found the chyle abounds too much in the blood.

1°. In the women who eat much; and who feed on very succulent food, which produces a great quantity of chyle.

2°. In women, who use little exercise; and who lead an indolent and sedentary life, which dissipates little of the chyle.

3°. In lying-in women, who have checked their milk; and in those who, having given suck, leave off too early: which occasions, that the chyle, before converted into the milk, is then intirely turned into the milky juice of the *uterus*.

In the *fluor albus*, that depends on the *first* order of the causes, the humour which flows is white, thick, and truly milky: because it is true milk, that is only faulty in its copiousness.

II. The milky juice is too fluid, and even so as to steal a passage through the orifices of its vessels, though duly closed, in the following cases, where the blood which supplies it is itself too serous; as,

1°. In women of a viscid and phlegmatic habit of body, or accustomed to drink much water.

2°. In women whose blood is dissolved by a slow fever, or by some other languishing disorder.

3°. In the women, who have liquefied their blood by the use of aperitive remedies, or attenuants, too strong, and too long continued.

In the *fluor albus*, that comes from the *second* order of causes, the humour, which flows, is clear, and mucilaginous, like water-gruel: because the milky juice is diluted with too much *serum*.

III. The

III. The orifices of the lactiferous veſſels of the *uterus* are too open, or too eaſy to be opened, and conſequently ſuffer the milky juice they contain to eſcape too readily, in the following caſes:

1°. In women of a conſtitution naturally weak, and delicate; in whom all the veſſels, and conſequently thoſe of the *uterus*, are, by the faultineſs of the conformation itſelf, too lax, too thin, and too open, or too eaſy to be opened.

2°. In women, in whom the lactiferous veſſels of the *uterus*, and conſequently their orifices, are too much ſoftned by the milky juice itſelf, which is too ſerous, by the effect of different cauſes, that have been enumerated above.

3°. In women, in whom the interior coat of the *uterus*, which ſerves to cover, and contract the orifices of the lactiferous veſſels, is relaxed, or weakned by frequent or hard labours; or by ſeveral miſcarriages.

4°. In the women, in whom the *uterus* is too often thrown into a ſtate of contraction, by laſcivious ticklings, or by the exceſs of proſtitution; which, by repeating too often, the preſſure of the lactiferous veſſels of the *uterus* forces the orifices, as at length relaxes them.

In the *fluor albus*, produced by the *third* order of cauſes, the humour generally keeps a middle ſtate betwixt that of the milky *fluor albus*, and that of the mucilaginous. It is leſs thick, white, and milky, than in the milky *fluor albus*; but more ſo than in the mucilaginous; or, in other words, it is like milk diluted with much water; or, if you will, whey badly clarified.

Hitherto nothing has been ſaid, but of the ſimple milky *fluor albus*, which depends only on one ſingle cauſe; either the copiouſneſs, or the thinneſs of the milky juice; or the *inertia* of the veſſels deſigned to contain it: and this is the *firſt claſs* of the *fluor albus* of this kind.

But it may be eaſily judged, that there muſt be a kind of milky *fluor albus*, more compound, which depends

depends on two or three cauſes at the ſame time; that is to ſay, on the copiouſneſs and on the thinneſs of the milky juice: and on the *inertia* of the orifices of the veſſels which contain it: or, in ſhort, on the *inertia* of the orifices of theſe veſſels; and on the copiouſneſs of the juice: and this is the *ſecond claſs* of the *fluor albus* of this kind.

It may even happen, and it often does, that the milky *fluor albus* proceeds from theſe three cauſes, combined: from the copiouſneſs of the milky juice, its thinneſs, and the *inertia* of the orifices of the veſſels: and this is then the *third claſs* of this kind of *fluor albus*.

It is not neceſſary to dwell on the reaſons of the different combinations of the cauſes of the milky *fluor albus*, which may give riſe to the compound kinds of the ſecond and third claſſes. It ſuffices to take into conſideration the different cauſes of the ſimple *fluor albus* of the firſt claſs, in order to judge what thoſe are, which have the moſt affinity with each; and which may moſt eaſily produce, by their concurrence, theſe particular combinations.

Cauſes of the lymphæus fluor albus.

The lymph that circulates in the lymphatic veſſels, with which the ſurface of the internal coat of the *uterus* is ſupplied, cannot be evacuated into the cavity of the *uterus*, and give riſe to the lymphatic *fluor albus*, but from one of theſe two cauſes. 1°. Either becauſe it is obſtructed in its veſſels; and forced to exude through their coats, after having dilated them; and in this caſe, the *uterus* is in the ſtate of an *œdema*: 2°. Or becauſe the continuity of its coats is broken in ſome places; and theſe diviſions give paſſage for it to eſcape: and, in this caſe, the *uterus* is in a ſtate of exulceration. But let us examine theſe two cauſes more minutely.

I. The lymph is obſtructed in its veſſels, and found to exude through the pores of their coats, and run into the cavity of the womb, from three cauſes.

1°. When

1°. When there is a conſiderable *deſcenſus* of the *uterus*; which, by elongating, doubling back, and dragging or compreſſing the lymphatic veſſels, obſtructs, or retards the courſe of the lymph.

2°. When there are obſtructions, tubercles, *ſchirruſſes*, or cancers in the body itſelf of the *uterus*; which compreſs there the lymphatic veſſels; and obſtruct the circulation of the lymph.

3°. When there are repletions, tumours, or indurations, in the lymphatic glands, to which the lymphatic veſſels lead, that return from the *uterus*: as the glands of the *pelvis*, or of the bifurcation of the *iliacs*: which hinders the lymph from paſſing forward, and obliges it to ſtagnate in its capillary veſſels.

The obſtacles, mentioned in the two laſt articles, may come either from an inſpiſſation of the blood, and particularly of the lymph, produced by common cauſes; or, what is more frequent, from an inſpiſſation of the blood, or of the lymph, produced by ſome vitious leven, either venereal, ſcorbutic, ſcrophulous, or cancerous: and from thence it reſults, that this kind of *fluor albus* accompanies almoſt always theſe diſeaſes, when they are of long ſtanding.

II. The continuity of the lymphatic veſſels is broken in the *uterus*; and the diviſions of their coats give riſe to the evacuation of the lymph in theſe two caſes,

1°. When the lymphatic veſſels, in conſequence of being too full of lymph, that is obſtructed there, burſt of themſelves in ſome places: which is the general conſequence of the repletion of theſe veſſels, when too great, or too long continued.

2°. When there is any place in the interior coat of the *uterus* torn, excoriated, divided, or eroded: which cannot happen, without deſtroying the continuity of the lymphatic veſſels, that are diſtributed there.

The cauſes of theſe ſolutions in the lymphatic veſſels of the *uterus* are the ſame with thoſe of that of the blood-veſſels, which have been amply ſpoken of in the *preceding Chapter*; or, at leaſt, they only differ

in

in the degree of power. As inſtead of its being neceſſary, that the action of theſe cauſes ſhould be conſiderably great, when it is to be extended to the blood-veſſels, it may and muſt be ſuppoſed much more weak, when it is confined to the lymphatic veſſels alone, which are greatly more eaſy to be divided, or exeded.

What has been ſaid of the combinations of the three ſeveral orders of the milky *fluor albus* muſt be extended, in the ſame manner, to the two orders of the lymphatic.

1°. This kind of *fluor albus* may be ſimple, and depend only on one cauſe: either on the exudation of the lymph; or on its flowing out.

2°. This kind of *fluor albus* may, alſo, be compound, and depend on two cauſes at the ſame time: on the exudation, and the flowing out of the lymph: and this combination muſt be frequent, conſidering the affinity of the cauſes.

One other caſe muſt be added, which may, and undoubtedly often does happen, although it be difficult to be certain of it: which is, that the milky *fluor albus* is ſometimes conjoined with the lymphatic: in which caſe, this combination gives riſe to a kind, which is partly milky, and partly lymphatic; or, if the expreſſion be thought more proper, lymphatico-milky.

§. III. *Explanation of the differences mentioned in the deſcription of the* fluor albus.

Firſt difference. The *fluor albus* is either attended with a ſuppreſſion of the *menſes*, or happens without any.

1°. There is a ſuppreſſion of the *menſes*, when theſe three circumſtances come together. When the *fluor albus* is milky: when it is of the firſt, and ſecond order: and when the diſcharge is copious: becauſe then the lactiferous veſſels empty themſelves as faſt as they fill; and, conſequently, can never compreſs the

neighbouring veins, ſo as to turn the blood into the veinous *appendices*, in the manner requiſite for menſtruation. The ſuppreſſion of the *menſes* happens alſo, at laſt, in the lymphatic *fluor albus*, when it continues a long time, has been very copious, and has exhauſted the patient: which is a ſtate directly oppoſite to that of the *plethora*, neceſſary for the eruption of the *menſes*. But, in both theſe caſes, the total ſuppreſſion does not happen till after the *menſes* have paſt through ſeveral ſucceſſive degrees of diminution.

2°. There is no ſuppreſſion, when the *fluor albus* is milky, and of the firſt order; or when it is lymphatic and recent: becauſe, in the firſt caſe, the lactiferous veſſels do not ſuffer any diſcharge, but of the redundant part; and, conſequently, remain ſufficiently full to excite the *menſes*. And in the ſecond: they are not made ſufficiently empty, to cauſe a ſuppreſſion of them. Nevertheleſs, even in this caſe, when the diſorder is protracted, the diſcharge of the *menſes* is affected: and, after having been diminiſhed gradually, ceaſes at laſt intirely.

Second difference. The *fluor albus* is either conſtant; or ſubject to intermiſſions.

1°. The milky *fluor albus* of the ſecond and third orders, is generally conſtant, eſpecially when the thinneſs of the milky juice, or the dilatation of the orifices of the veſſels deſtined to contain it, are conſiderable: becauſe, that then the juice muſt continually flow out. The lymphatic *fluor albus* is, likewiſe, almoſt always conſtant: becauſe the lymph muſt run out continually, if it be ſuppoſed, the lymphatic veſſels are forced, or torn.

2°. The milky *fluor albus* of the firſt order, is, on the contrary, almoſt always intermittent: becauſe, in that caſe, the veſſels only ſuffer the milky juice to be diſcharged when they are too full. The milky *fluor albus* of the ſecond, and the third order, is, in the ſame manner, intermittent, as often as the thinneſs of the milk, or the dilatation of the orifices of the veſſels which contain it, are only in ſuch moderate degree, as

not

not to cauſe the milky juice to open a paſſage, and be diſcharged, till after being accumulated in a certain quantity, and, conſequently, during a certain time. From hence it is eaſy to judge, that the *fluor albus*, which is intermittent, may become conſtant; and ſometimes thoſe, which are conſtant, become intermittent.

Third difference. The diſcharge of the *fluor albus* is either variable, and ſubject to augmentations: or uniform, and without augmentations.

1°. The milky *fluor albus*, which is conſtant, is always ſubject to augmentations, whenever the diſcharge does not exhauſt all the milky juice, which paſſes into the veſſels of the *uterus*: becauſe what remains, muſt gradually form a collection, that is diſcharged by intervals, when it has riſen to a certain degree. The lymphatic *fluor albus* is ſubject alſo to variations: which are, that it is diminiſhed, when the lymph is derived from the veſſels of the *uterus* by any other evacuation: and that it is augmented, when the lymph is determined elſewhere, by ſome fault in the regimen, or any violent exerciſe.

2°. The milky *fluor albus*, which is conſtant, is diſcharged uniformly, and without augmentation, whenever the milky juice flows out intirely, as it is ſeparated, without any part of it ever remaining in the veſſels. The lymphatic *fluor albus* maintains an uniform courſe in the ſame manner, when no variation occurs in the regimen, exerciſe, or evacuations; nor in the other non-natural cauſes.

Fourth difference. The augmentations of the conſtant *fluor albus* either obſerve a periodical order; or do not obſerve any.

1°. Theſe augmentations always obſerve a periodical order, when they happen to the milky *fluor albus*: becauſe then they depend on the collection of milky juice accumulated gradually in its veſſels; and this collection is made according to the period of the *menſes*.

2°. These augmentations do not observe any periodical order, when they happen in the lymphatic *fluor albus:* because they are only owing then to causes purely accidental. They do not observe any, even in the milky *fluor albus*, when the accidental causes are sufficiently strong to disturb the periodical order; which would otherwise prevail.

Fifth difference. The returns of the intermittent *fluor albus* are either periodical; or they are not so.

1°. The returns are periodical, whenever the intermittent *fluor albus* is of the milky kind: because these returns proceed then from, that the quantity of milky juice, which is accumulated in the vessels of the *uterus*, is sufficiently copious, to force them to open; and that, in the regular and periodical intervals, it must be accumulated every different time. In this case, therefore, unless some accidental cause disturbs the order, the *fluor albus*, after having been suspended, must re-appear some days before the eruption of the *menses:* because there is so much time required for the accumulation of the milky juice. It must augment from day to day, according to the time of the eruption: because the quantity of the milky juice goes on augmenting till that time. It must diminish afterwards gradually, in proportion as the milky vessels empty themselves, and in proportion as the orifices of the vessels contract. And at last, when these vessels are closed, it must cease intirely to return again in the same order, if no other cause interfere, that is capable of disturbing it.

2°. These returns are, on the contrary, irregular, when the *fluor albus* is lymphatic: because they depend then on the fortuitous concurrence of several accidental causes. *See difference the third.* Sometimes the same irregularity is observed even in the returns of the milky *fluor albus*, when the periodical order is perverted by some casual accident, as has been already mentioned.

Sixth difference. The *fluor albus* is of different colours: sometimes white like milk, whey, or water-gruel: some-

times tranſparent like water: ſometimes yellow; of the colour of a marigold; gold coloured; and light yellow: and ſometimes green; brown; and reddiſh.

1°. It is white like milk, whey, or water-gruel, when they are milky of the firſt, ſecond, and third orders; and that the natural colour of the milky juice is not changed.

2°. It is clear as water, when they are lymphatic; and that the lymph is pure, and without mixture.

3°. It is yellow, of different ſhades, when the natural colour of the milky juice, or of the lymph, is altered by the mixture of bilious parts, more or leſs in quantity; or more or leſs yellow: or by the mixture of ſome drops of blood, more or leſs in quantity, or more or leſs intimately mixed. The firſt cauſe has no need of any proof. The ſecond may be proved by the inſtances of the ſpittle, which is coughed up, in the peripneumony, of which the yellow and ſaffron colour is leſs owing to the mixture of bile, than to ſome drops of blood; which are intimately blended with it.

4°. It is green, when the bile, which is mixt with it, is of a dark green colour; or that purulent parts, with which it is charged, communicate their own hue to it.

5°. It is red, like the waſhings of fleſh; and ſometimes even of the colour of roſes; according as the quantity of blood, which eſcapes from the veſſels, and mixes with it, is more or leſs great; and as the two ſubſtances are mixt more or leſs intimately with each other.

Seventh difference. Sometimes the *fluor albus* is without ſmell, and acrimony; ſometimes it is acrid and corroſive; and ſometimes it is of a ſtrong, and even fœtid ſmell.

1°. It is without acrimony, when the milky humour and the lymph are pure, and without any mixture either of bile or *pus*; when theſe humours are furniſhed by a ſweet blood: and when they do not ſtagnate in the *uterus*.

2°. It is, on the contrary, acrid and corrosive, in the three opposite cases: when these humours are changed by some mixture of bile, or of *pus*; when they come from an acrid and saline blood; or when they are too long retained in the *uterus*, where they heat, and are corrupted.

3°. It has a smell, and often even such as is fœtid, in the same circumstances.

§. IV. SYMPTOMS.

I. The discharge of the *fluor albus* diminishes the quantity of blood, in proportion as it is more copious, more constant, and of longer standing. From whence tabidness and paleness proceed, always in proportion to the greatness, and the length of the disorder.

II. In proportion as the quantity of blood is diminished, the fibres of the muscles are relaxed, for want of being stretched by the blood-vessels, which supply them: and, at the same time, the animal spirits flow there in less quantity; because fewer are separated in the brain. From whence proceeds the relaxation of the muscles; and, consequently, the lowering, and exhausting of the strength.

III. The diminution of the volume of the blood, causes the diminution of the quantity of *saliva*, that is separated in the glands of the mouth, which weakens the action of it: and the diminution of the influx of the animal spirits, causes the *atonia* of the nervous *papillæ* of the tongue, which weakens the sensibility of it: from whence comes the want of appetite, and disgust to food.

IV. For the same reasons, the lymph of the stomach must be then separated in less quantity: because the volume of the blood is less. The fibres of the stomach must, at the same time, be in a state of *inertia*; because the spirits do not flow thither in sufficient quantity. From whence it proceeds, that the digestion of the food is slow and imperfect.

V. The discharge of the *fluor albus* carries off from the blood a part of the chyle and the lymph, which has

has already had time to become perfect: and the *primæ viæ* only furniſh a chyle to replace it, that is ill prepared, and often even too much abounding in *ſerum*. From whence proceeds *cachexy*.

VI. The contractions of the heart are weak in the *fluor albus*, for the ſame reaſons, which cauſe the weakneſs of the contractions of the other muſcles. *See* N° 2. The blood will be then only propelled weakly in the capillary extremities of the arteries; and the humours more weakly yet in the ſecretory ducts of the different ſtrainers which take their riſe from the extremities of the capillary arteries. But theſe humours, which are then formed of a chyle ill digeſted, are more thick than common; and they muſt therefore, by the aſſemblage of theſe two cauſes, ſtagnate, be obſtructed, and grow thick in their own ſtrainers. From whence comes the repletion, and the obſtructions of the ſeveral *viſcera*, and even of the ſeveral lymphatic glands.

VII. The repletions, and the obſtructions of the *viſcera*, when they impede the blood to a certain degree, turn the courſe of it; and, in the ſame circumſtances, the repletions and obſtructions of the lymphatic glands ſtop the courſe of the lymph. By the firſt of theſe two cauſes, the lymphous *ſerum* of the blood, obſtructed in its veſſels, muſt paſs more abundantly into the lymphatic veins, which take their riſe from them. By the ſecond, the lymphous *ſerum*, which has paſſed into theſe veins, returns more difficultly. And by the concurrence of both, the lymphous *ſerum* of the blood muſt ſtagnate, and be accumulated in the different parts of the body, according to the different poſtures: in the inferior extremities, when the patients are a long time ſtanding or ſeated; and in the face, the eyelids, and around the eyes, when they are laid down.

VIII. The bad chyle, which the *primæ viæ* furniſh conſtantly to the blood; and the different humours, which the obſtructions of the *viſcera* detain continually in it; muſt gradually change the natural con-

dition of it; and communicate to it at laſt a vicious acrimony. From whence it proceeds, that the *cachexy*, which was only ſerous at firſt in the *fluor albus*, becomes in time acrid and *muriatic*.

IX. On this account the *fluor albus*, of whatever nature it may have been at firſt, becomes likewiſe almoſt always acrid and corroſive; and cauſes, at laſt, choppings, or diviſions of the exterior membrane in the *vagina*; and more particularly in the *vulva*. From whence the itchings, ſmartings, excoriations, and ulcers, which happen in thoſe parts.

X. From the ſame reaſons, the *fluor albus*, the leaſt capable of irritating in the beginning, injures, at length, the internal ſurface of the *uterus*; and brings on a *phlogoſis*, more or leſs great, and more or leſs painful. Whence ariſes the tenſion and pain of the *uterus*; and the pains of the loins, reins, groins, *pubis*, &c. according to the places of the *uterus*, which are the moſt affected.

XI. The accidents mentioned in N° IX and X, are as much greater, and happen as much oftener, as the *fluor albus* is more acrid, and more corroſive in its nature; as the habit of the patients is more bilious; and as the regimen, which they obſerve, is more faulty.

XII. In theſe circumſtances, the depravity, which the blood contracts daily; the purulent nature of the humour with which the *uterus* is moiſtned; and of which ſome parts enter into the blood; the almoſt continual pains of the *uterus*; and the bad chyle which comes from the *primæ viæ*; muſt at length excite a ſlow fever, ſubject to *paroxyſms*; moderate in the beginning, but augmenting, gradually, and thence conducing to aggravate the diſorder, more and more.

XIII. The ſame mechaniſm, which contracts and cloſes the bladder, when the patients make efforts to void the urine, contracts and cloſes the *uterus* at the ſame time. The milky or lymphatic humour, therefore, which ſtagnates in the *uterus*, muſt run out of it

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at the ſame time as the urine runs from the bladder; and a commixture muſt be made of them in the *vulva*. From thence it comes, that in women, who have the *fluor albus*, the urine is thick, turbid, and charged with ſtreaks or flakes in a viſible manner, in proportion as the *fluor albus* is itſelf more copious, milky, or purulent.

XIV. The women, ſubject to the *fluor albus*, are almoſt always barren: or, if they conceive, which is rare, they either miſcarry, or, at beſt, are only delivered of children, that are weak, languiſhing, and unſound. But as it is neceſſary, in order to the explanation of theſe facts, to underſtand the circumſtances neceſſary for conception, uterogeſtation, and the nouriſhment of the *fœtus*, the ſpeaking of it muſt be deferred to *Book III*; where what regard theſe functions, will be treated of particularly.

XV. For the ſame reaſon, muſt be deferred to *Book II*; where the ulceration, dropſy, and *deſcenſus* of the *uterus*, will be treated of, the explanation of the cauſes which occaſion, that the *fluor albus* of long ſtanding brings on ſo often theſe kinds of diſorders.

§. V. DIAGNOSTIC.

Diagnoſtic of the diſorder. The women conſider the *fluor albus*, as a diſeaſe of which they are aſhamed; on which account, they are loth to confeſs they have it, and therefore, ſometimes, carry the concealment ſo far, as not to aſk advice, but in the laſt extremity. They often, moreover, avoid revealing the circumſtances, which might ſerve to give a clearer light into the nature, kind, and cauſe of the diſorder.

It is not, therefore, without difficulty, that a certain knowledge is attained of their having the *fluor albus*; when, in conſequence of interrogating them, the confeſſion is extorted of their having a white or ſerous diſcharge, conſiderably copious; without burning, heat, or pain in the parts; not attended with any heat of urine; ſuch as does not prevent their having commerce

commerce with their husbands without pain; augmenting towards the time of the *menses*, and diminishing in proportion to the distance from them; sometimes ceasing, and returning periodically or irregularly; and even when constant, generally subject to variations, more or less great, and more or less irregular.

Nevertheless, all these criterions do not hinder the often confounding with the discharge of the *fluor albus*, two other discharges, which come from the same parts: to wit, the discharge of an ulcer of the *uterus*, and the discharge of a slight venereal infection, or a constant and virulent *gonorrhœa*: and from these it is most material to distinguish the *fluor albus*.

I. There are means of distinguishing the *fluor albus* from the purulent discharge of the *uterus*, in two cases: *the one*, when the *fluor albus* is recent: *the other*, when it is of long standing.

The diagnostic is easy in the *first case*; that is to say, when the *fluor albus* is recent.

1°. Because, in the recent *fluor albus*, the *uterus* affords no signs of *pus*: whereas there is the appearance of *pus* in the discharge of an ulcer.

2°. Because, in the recent *fluor albus*, the matter is devoid of smell, and acrimony; or, at least, has but a small proportion of either: whereas, in the purulent discharge of the *uterus*, it is always very acrid, and fœtid.

3°. Because, in the recent *fluor albus*, there is neither pain, nor heat, in the *uterus*; or, at most, only such as is slight: whereas, the pain is acute, and the heat great, when the discharge is from an ulcer.

4°. Because, in the recent *fluor albus*, there is no fever: whereas, on the contrary, there is always a slow fever in the purulent running of the ulcer of the *uterus*.

5°. Because the recent *fluor albus* is not preceded by any sign of inflammation, abscess, or ulcer in the *uterus*:

whereas, the purulent diſcharge of an ulcer is always preceded by them.

In the *ſecond caſe*; that is to ſay, when the *fluor albus* is of long ſtanding; the diagnoſtic muſt be founded on the ſame ſigns: but it is much more difficult; becauſe it frequently happens, that the *fluor albus*, of long ſtanding, is attended with a ſlow fever; and even with conſiderable pain and heat in the *uterus:* and that the humour is not only fœtid, and acrid, but even purulent; or, at leaſt, of a nature, which approaches greatly to purulence: that is to ſay, it often happens, that the *fluor albus*, of long ſtanding, unites the greateſt part of the ſigns, which have been mentioned as proper to purulent diſcharges. But it is not, however, neceſſary in this caſe, to take the trouble of diſtinguiſhing this ſort of *fluor albus* from that kind of diſcharge: becauſe it is known by experience, that the *fluor albus*, of long ſtanding, becomes, at length, almoſt always purulent, in cacochymic perſons; though it does not always become ſo in the ſame degree, or in the ſame ſpace of time.

II. There is, likewiſe, the ſame means of diſtinguiſhing the *fluor albus* from a venereal *gonorrhœa*, in three caſes: when the *gonorrhœa* is recent; when it is of long ſtanding, and has degenerated into a conſtant gleet; and when there is a complication of it with the *fluor albus*; whether the *gonorrhœa* come after the *fluor albus*, or the *fluor albus* after the *gonorrhœa*.

In the *firſt caſe*; that is to ſay, while the *gonorrhœa* is recent, and conſequently inflammatory; the diagnoſtic is ſufficiently eaſy.

1°. On account, that in the *fluor albus*, there is no heat of urine; which there is in the recent *gonorrhœa*.

2°. On account, that in the *fluor albus*, there is no inflammation either in the *vulva* or *vagina*; and that in the recent *gonorrhœa*, there is inflammation in one or other of theſe places, and often in both.

3°. On

3°. On account, that, in the *fluor albus*, the women ſuffer the approach of men without pain; whereas they cannot in the recent *gonorrhæa*.

4°. On account, that, in the *fluor albus*, there is almoſt always pain in the loins, more or leſs acute; whereas there is not the leaſt in the recent *gonorrhæa*.

In the *ſecond caſe*; that is to ſay, when the *gonorrhæa* degenerates into a conſtant gleet; the diagnoſtic is more difficult; and it can only be founded on the following ſigns.

1°. On that the diſcharge of the *menſes* ſubſiſts without diminution in the conſtant gleet: whereas, moſt commonly, it ceaſes, or diminiſhes, in the *fluor albus* of the ſame date.

2°. On that the conſtant gleet muſt have been preceded by thoſe ſymptoms which are peculiar to the recent and inflammatory *gonorrhæa*: whereas, theſe ſymptoms have not preceded in the *fluor albus*.

3°. On that the diſcharge is very moderate in the conſtant gleet: whereas it is commonly more copious in the *fluor albus*.

4. On that the conſtant gleet communicates itſelf to thoſe who have commerce with the patients: whereas the *fluor albus* is never infectious; and that it cannot effect more, than the producing ſlight excoriations, without any other conſequence.

In the *third caſe*; that is to ſay, when there is a complication of the *fluor albus* and *gonorrhæa*, either it muſt be, 1°. That the *gonorrhæa* comes after the *fluor albus*; and then there is time beforehand to diſtinguiſh the *fluor albus* by the appearances that are peculiar to it, and which have been enumerated in the beginning of this article: and when the *gonorrhæa* comes, it may be known by the appearances, which diſtinguiſh it: ſuch as heat of urine; burning; *phlogoſis*; the inflammation of the parts; pain in coition; &c.

Or otherwiſe, 2°. It muſt be, that the *fluor albus* comes after the *gonorrhæa*, which is nevertheleſs rare;

then the *gonorrhæa* may be beforehand diſtinguiſhed, by its peculiar appearances, when it has begun: and the *fluor albus* diſtinguiſhed in its turn, by the appearances, which makes its proper ſpecification, when it is come on.

III. The appearances, that have been mentioned, ſuffice for the diſtinguiſhing the *fluor albus* from a conſtant gleet, or from a virulent *gonorrhæa*, if dependance could always be had on the accounts given by the patients of themſelves. But it ſometimes happens, that they have only had a ſlight *gonorrhæa*, which has not cauſed heat of urine, or burning in the parts, in a ſufficient degree to be taken notice of; while at other times it happens, that being inattentive, or ignorant, they overlook theſe accidents, though more diſtinguiſhable; or have neglected them as of little conſequence: and, moreover, it happens more frequently ſtill, that they have very cogent reaſons for concealing what has befallen them, and what they have obſerved, in order to endeavour to make their caſe be believed to be different. In ſuch circumſtances, theſe are the means to clear up the doubts they raiſe, by their ſimplicity, or to avoid the impoſition they intend; and to procure the neceſſary lights for judging, if the diſcharge, of which they complain, ought to be imputed to a conſtant virulent *gonorrhæa*, or to the ſimple *fluor albus*.

1°. The quantity of the diſcharge ſhould be firſt well examined. In general, it is always moderate in the conſtant *gonorrhæa:* whereas it is, for the moſt part, conſiderably copious in the *fluor albus*. It may, therefore, be decided, with ſufficient certainty, to be the *fluor albus*, when the diſcharge is copious: but it muſt be confeſſed, that when the diſcharge is moderate, it is not equally deciſive, that it is a *gonorrhæa:* becauſe, ſometimes, the *fluor albus* is ſcarcely more copious than a ſimple *gonorrhæa*.

2°. In this laſt caſe, recourſe muſt be had to the examination of the patients. There are diſtinguiſhed, in women, three ſeats of virulent *gonorrhæas*; and, con-

conſequently, as many of conſtant gleets. 1°. The *proſtata*; from whence the matter flows into the higher part of the *vulva*, by the *lacunæ*, on the right and left of the *urethra*: 2°. Cowper's glands, placed at the lower part of the *vulva* in the *iſthmus*, or about the entrance of the *vagina*; from whence the matter flows into the *vulva*, near the *anus*; or into the bottom of it, near the entrance of the *vagina*. 3°. The glands of the *vagina* itſelf; from whence the matter flows into its cavity, and runs from thence into the *vulva*.

In the two firſt caſes, by the examination of the patient, either there is a certainty of the reality of the *gonorrhæa*, when the matter is ſeen to run out of the *lacunæ*, or the orifices of Cowper's glands; when it is ſeen to be collected in the higher or lower parts, or the bottom of the *vulva*, without any thing running from the *vagina*; or when the redneſs of the extremities of the *lacunæ*, or of the orifices of Cowper's glands, is viſible: or there is, on the contrary, a certainty, that it is only a ſimple *fluor albus*, when the matter is ſeen to flow from the *vagina* without any change in the extremities of the ſeveral excretory ducts of the *proſtata*, and Cowper's glands.

3°. But the ſame advantage is not to be had in the third caſe: becauſe in the *gonorrhæa* of the *vagina*, the matter runs from the bottom of the *vagina* itſelf, as in the moſt ſimple *fluor albus*. There does not remain conſequently any reſource, except information, with regard to the conduct of the patients, or that of their huſbands, if they be married: and if there be reaſonable ſuſpicions, the remedies ought, without heſitation, to be employed, which are proper in a *gonorrhæa*; and which happily are not againſt the *fluor albus*. This practice will ſoon procure the neceſſary lights; for if it ſucceeds fully, it is a proof, that the diſorder was only a ſimple *gonorrhæa*; and if it do not ſucceed at all, it is a ſign that the diſorder is only a ſimple *fluor albus*; and if it ſucceeds in part, it may be reaſonably

ſonably concluded, that the diſorder was a complication of a *gonorrhæa* and *fluor albus*.

IV. This dilemma would never occur, if it was true, that there were one certain criterion for diſtinguiſhing the diſcharge of a *gonorrhæa* from the *fluor albus*; as ſeveral [1] phyſicians have pretended. For if we were to give credit to them, there would be nothing more required, than to procure the information, whether the diſcharge continued during the time of the *menſes*, or ceaſed while they flowed. In the firſt caſe, it is, according to them, always a virulent *gonorrhæa*, or a gleet; and, in the ſecond, only a ſimple *fluor albus*.

I did not think it neceſſary to inſert here the paſſages of authors, who have advanced theſe facts as certain; as it is ſufficient to refer to them, in order that they may be conſulted: but I thought it proper to mention the words themſelves of Baglivi [2]; who, without quoting any perſon, ſpeaks, as originally, on this matter in the moſt preremptory manner. This inſtance may ſerve to caution young phyſicians againſt that air of confidence, with which this author uſually decides in caſes the moſt problematical.

Fluor albus uterinus, ſays he, *& gonorrhæa gallica adeò ſimilibus concomitantur ſymptomatis, ut quiſquis Medicorum ferè ſemper decipiatur in illorum diagnoſi, præſertim cùm mulierculæ verecundiâ perfuſæ gonorrhæam per impurum ſcortum contractam fluoribus uterinis mentiantur. Ne ſuccedant in poſterum hæc incommoda, dabo ſignum in-*

[1] Johannes Fernelius, *Patholog. Lib. VI. Cap.* 16.

Jean Liebault, *De la ſanté, fecondité & maladies des femmes. Lib. II. Cap.* 86.

Ludovicus Mercatus, *De affection. Mulierum. Lib. I. Cap.* 15.

Rodericus à Caſtro, *De Morbis Mulierum. Lib. I. Cap.* 14.

Lazare Pé, *Maladies des Femmes. Liv. II. Cap.* 36.

Jacobus Primeroſius, *De Morbis Mulierum.*

François Mauriceau, *Maladies des Femmes groſſes. Traité Anatomique des Parties des Femmes qui ſervent à la génération, Cap.* 6.

Gualtherus Charleton, *De Cauſis Catameniorum & uteri Rheumatiſmo, Cap.* 8.

Petrus Freſart, *Emmenolog. Cap.* 10.

[2] *Praxeos, Lib. II. Cap.* 8. *Artic.* 3.

fallibile

fallibile tales morbos ad invicem distinguendi. Pete à muliere, an superveniente menstruo sanguinis fluxu, perseveret quoque eodem tempore fluor ille albæ materiæ; si dicat quòd sic, significato eidem quòd morbus, à quo divexatur, sit gonorrhæa gallica; si verò, durante menstruatione fluor albus evanescat, & eâdem finitâ denuò regrediatur, pro certo habeas mulierem fluore uterino laborare. Cætera signa fallunt, hoc verò constans est & mulierum dolum apertè deludit.

But, in spite of the number of authorities, and the decisive tone of Baglivi, who seems to countenance this notion, nothing is more ill founded; nothing more false; than this pretended criterion. For, 1°. The discharge of the *fluor albus* does not cease during the *menses*, it only becomes imperceptible, because the discharge of blood, which comes from the same places, does not permit it to be then distinguished. 2°. It is evident, that, in the *gonorrhæa*, which has its seat in the glands of the *vagina*, and is that in question here, the same thing must happen from the same reason; as the blood of the *menses*, which is mixt, at that time, intimately with the matter itself of the *gonorrhæa*, prevents it from being distinguishable; which renders this pretended criterion absolutely useless in this kind of *gonorrhæa*, which is the principal subject of consideration here. 3°. I subjoin, that this criterion is equally useless in the *gonorrhæa* of Cowper's glands; and even in that of the *prostatæ*; when the *menses* are copious: because, it is impossible, but that the whole extent of the *vulva* must be then overflowed with the blood, that runs from the *vagina*: which must change the matter, that comes out from the excretory ducts of the glands; and prevent its being distinguished.

V. We should be greatly to blame to have spent so much time on a diagnostic so difficult, if it were true, as Pitcairn pretends, that this diagnostic was useless. It is not even necessary, according to him, to distinguish the virulent *gonorrhæa* from the *fluor albus*, because the latter, even when it has nothing venereal, can

can ſcarcely ever be cured, but by anti-venereal remedies: *Non opus eſt*, [1] ſays he, *diſtinguere inter fluorem muliebrem gallicum & non gallicum, cum rarò (ſecùs ac in viris) poſſit fluor albus tolli, etiamſi virulentus non ſit, niſi remediis lui gallicæ propriis.*

It is on the ſame principle, that this author omits to preſcribe any remedies for the *fluor albus*, into which *mercurius dulcis*, cinnabar, guaiacum, ſarſaparilla, &c. do not enter. But the principle is falſe; and the practice dangerous. Reaſon itſelf dictates, that anti-venereal remedies are not proper, where there is nothing venereal; and experience is perfectly agreeable to reaſon, with reſpect to this article.

Diagnoſtic of the ſpecies of the diſorder. When the diſeaſe itſelf is clearly aſcertained, it muſt be endeavoured to diſtinguiſh the particular kind; and, in order to judge of that, it is proper to examine the condition of the cloths worn by the patients.

I. The *fluor albus* is milky, where the matter of the diſcharge is thick: when it does not run through the cloth, nor penetrate into the folds: when it is glutinous, &c: and it is to be conſidered as milky of the firſt, ſecond, or third kind, according as the matter is more or leſs white; or has more or leſs reſemblance to water-gruel.

It is, on the contrary, lymphatic, when it is ſerous, eaſily imbibed by the folds of the cloths, and ſinks into them; and when it is ſlightly, or not at all glutinous.

II. The ſimple examination of the cloths affords a certainty, whether the matter of the diſcharge be white, yellow, green, or red; and in what degree: as alſo, whether it have any ſmell; and in what degree.

III. It is only by the accounts of the patients, that it can be known, whether the matter be acrid: whether it corrodes, or excoriate the part: whether it cauſe ſmartings, &c: or be, on the contrary, exempt from theſe qualities.

[1] *Elementor. Medicin.* Cap. 27.

IV. Moreover, it is, alſo, from the patients alone, that it can be learnt, whether the diſcharge be conſtant, or ſubject to intermiſſions: whether theſe intermiſſions be periodical, or not: whether the conſtant diſcharge ſuffers any variations: and, whether theſe variations obſerve any regular order: &c.

Diagnoſtic of the cauſes of the diſorder. The third article of the diagnoſtic of the *fluor albus* regards the cauſes, which produce it; and theſe cauſes are different, according to the different kinds of it.

I. If the humour of the *fluor albus* be milky; that is to ſay, like milk, whey, or water-gruel; the diſorder ſhould be imputed only to the eſcape of the milky humour of the *uterus:* and this eſcape, at leaſt when it begins, is not owing to any other cauſe, in general, than the copiouſneſs, and the fluidity of this humour; or to the dilatation, or relaxation, of the orifices of the veſſels deſigned to contain it. But the application of theſe cauſes varies in particular caſes.

Thus, 1°. When the humour is thick, and white, reſembling milk, and flows only at the approach of the *menſes*, the *fluor albus* proceeds only from the too great abundance of ſuch humour, particularly if the patients be fat, uſe little exerciſe, or have lately ſuppreſt their milk, in caſe of their having given ſuck.

2°. When the humour inclines to be tranſparent, but is white, and reſembling whey, and the diſcharge is conſtant, the *fluor albus* comes then both from the copiouſneſs and the fluidity of this humour; and ſometimes from the relaxation of the orifices of the veſſels which ſhould contain it.

3°. When the humour is mucilaginous, and reſembling water-gruel, and the diſcharge appears only towards the time of the *menſes*, the *fluor albus* comes either from the too great fluidity of this humour alone; or, which is more common, from the too great fluidity of the humour, and the too great relaxation of the veſſels intended to contain it.

4°. When

4°. When the humour is mucilaginous, and like water-gruel, and the diſcharge is conſtant, the *fluor albus* comes from the too great fluidity of this humour, and from the relaxation of the orifices of the veſſels where it is collected.

II. If the humour of the *fluor albus* be ſerous, and purely lymphatic, the diſorder can only be aſcribed to the eſcape of the lymph; and this eſcape is cauſed, either to the lymph's tranſuding through the coats of the veſſels which are too full; or to its extravaſation from the veſſels that are torn, which depends on the nature of the cauſes that occaſion the diſorder.

Thus, 1°. If it be known that the patient is ſubject to a *deſcenſus* of the *uterus*, that there are obſtructions, tubercles, *ſchirrus*, or cancer in the *uterus*; that the lymphatic glands, which ſerve as reſervoirs to the lymph which comes from the *uterus*, are obſtructed, gorged, indurated, &c. and that there are proofs, theſe ſeveral cauſes are yet recent, or of a moderate degree of power; in theſe caſes, the lymphatic *fluor albus* ought to be attributed only to a ſimple tranſudation of the lymph, through the coats of the lymphatic veſſels, which are too full; particularly when the diſcharge is ſparing.

2°. On the contrary, if there be proofs that theſe cauſes, or any of them, be of long ſtanding, or at leaſt ſubſiſt, in a very great degree, it is to be feared that the lymphatic veſſels are already torn, in conſequence of being too full, or too long a time full; and in this caſe there is room to ſuſpect, that the *fluor albus* proceeds now from the extravaſation of the lymph; more eſpecially when they are copious.

3°. There can be no doubt of the dilaceration of the veſſels; nor can the referring the *fluor albus* to the extravaſation of the lymph, which is the conſequence of it, be avoided, when it is known, that the internal coat of the *uterus* has ſuffered any violent diſtention, excoriation, eroſion, exulceration, &c.

III. Laſtly, of whatever kind the *fluor albus* may be, and from whatever cauſe they proceed, their colour,

ſmell, and acrimony, are certain indications of the ſtate of the interior ſurface of the *uterus*.

Thus, 1°. If the humour of the *fluor albus*, whether milky, or lymphatic, be clear; and without ſmell, and acrimony; it is a proof, that there is not any ſolution of continuity in the *uterus*; or, at leaſt, that if there be any, it is very recent, ſince there is no ſenſible ſuppuration.

2°. That, if on the contrary, the humour be yellow, green, or reddiſh; if it have a bad ſmell; or if it be acrid and corroſive; there can be no doubt then, that there is ſome diviſion of the veſſels in the *uterus*; and of a long ſtanding; ſince it has already produced ulceration and ſuppuration.

3°. Laſtly, the more the natural colour of the humour is changed, the ſmell fœtid, and the acrimony great, the more it muſt be concluded, that the exulceration of the *uterus* is large, deep, and of long ſtanding.

§. VI. PROGNOSTIC.

I. In general, 1°. The *fluor albus* is a troubleſome diſeaſe: which takes off from the cleanlineſs of the women, and renders them leſs agreeable to their huſbands.

2°. The *fluor albus* is always a bad diſeaſe, from the accidents that it uſually brings on: ſuch as barrenneſs, weakneſs, *cachexy*, leanneſs, diſguſt to food, obſtructions, tumefaction of the extremities, the *deſcenſus*, or exulceration of the *uterus*, &c.

3°. The *fluor albus* is a diſeaſe, for the moſt part, of long continuance, obſtinate, and difficult of cure, particularly in women of a bad conſtitution, *cachymic*, whoſe blood is depraved, or who have the *uterus* in a weak ſtate, obſtructed, or hurt: for, in theſe caſes, it laſts almoſt as long as life.

4°. The *fluor albus* is troubleſome, bad, and difficult of cure, only when it is conſtant, and copious: for otherwiſe, it is ſupportable, not attended with danger, and even capable of being cured, when it

it is moderate; and leaves long intervals, in which the patient is free from it.

5°. The *fluor albus*, even when conſtant, and copious, is rarely of itſelf a mortal diſeaſe; at leaſt, unleſs it brings on dropſy; ſlow fever; or an ulceration, *ſchirrus*, or cancers of the *uterus*.

II. In particular, 1°. The milky *fluor albus* is leſs bad, and more eaſy of cure, than the lymphatic: on account that it does not ſuppoſe any fault in the *uterus*; or that it ſuppoſes only a ſimple relaxation of the lactiferous veſſels; which may be eaſily remedied: whereas, the lymphatic *fluor albus* ſuppoſes always, in the *uterus*, either obſtructions, that ſtop there the circulation of the lymph, which are not eaſily to be removed; or dilacerations in the interior ſurface of it, which are yet more difficult to be cicatrized.

2°. Among the kinds of milky *fluor albus*, that which is the moſt truly milky, is the moſt eaſy to be cured: becauſe it does not ſuppoſe any local fault. That which is half milky holds the next rank: becauſe it moſt frequently ſuppoſes only a ſimple exceſs of fluidity in the milky humour of the *uterus*; which may be eaſily corrected. In the third rank may be placed that which is mucilaginous, like water-gruel: becauſe, beſides the too great fluidity of the milky humour, it ſuppoſes yet, moſt generally, a relaxation in the orifices of the lactiferous veſſels of the *uterus*.

3°. Of what kind ſoever the milky *fluor albus* may be, that which is ſubject to intermiſſions, whether periodical or irregular, is cured more eaſily than that which is conſtant; becauſe, in the laſt, there is always a relaxation in the orifices of the lactiferous veſſels of the *uterus*, which is not in the others; or, at leaſt, not in ſo great a degree.

4°. It follows from thence, that the more long the intermiſſions of the milky *fluor albus* are, and the leſs the diſcharge is, the more, likewiſe, it is curable; and, from the reverſe of theſe reaſons, that the more the milky *fluor albus* is conſtant and copious, the more, alſo, it reſiſts the effects of remedies.

5°. Among the kinds of the milky *fluor albus*, thoſe which come from the ſimple repletion of the lymphatic veſſels, from whence the lymph is forced to eſcape by way of tranſudation, are more eaſy to be cured, than thoſe which come from the dilaceration, or the eroſion of the veſſels: becauſe, in the laſt caſe, there is a ſolution of continuity, which always aggravates the diſorder.

6°. Of whatever kind the lymphatic *fluor albus* may be, it is always ſo much more dangerous, other things being equal, as it is more copious, or ſubject to longer and more frequent augmentations: becauſe, it is evident, that the cauſes, which produce them, muſt, in ſuch caſe, be either more univerſal in the extent of the *uterus*; or, at leaſt, more conſiderable, if they be not more univerſal.

III. Other things being equal, 1°. The diſcharges of the *fluor albus*, which are acrid, corroſive, and fœtid, are more dangerous, and obſtinate, than thoſe which have neither *fœtor*, nor acrimony: becauſe they more imminently threaten the *uterus* with ulceration; or even indicate the exulceration to be already made.

2°. The diſcharges, which are yellow, greeniſh, reddiſh, &c. are more dangerous, and obſtinate, than thoſe which are white, or tranſparent: becauſe they are always more acrid, and corroſive.

3°. The diſcharges, of long ſtanding, are more difficult of cure, than thoſe which are recent; becauſe they ſuppoſe an older, and more dangerous cauſe; and becauſe there is more reaſon to fear, that the internal ſurface of the *uterus* has already ſuffered ſome ſolution of continuity.

4°. The diſcharges, attended with pain in the *uterus*, are more to be dreaded, than thoſe which are without pain: becauſe pain is a criterion, that the *uterus* is inflamed, ulcerated, or in danger of becoming cancerous: which there is no reaſon to apprehend, when there is no pain in the *uterus*.

5°. The diſcharges are generally more eaſy to be cured, and leſs dangerous, in young women, in whom the

the blood is, for the moſt part, more ſweet, and the elaſticity of the *uterus* more ſtrong, or at leaſt more eaſily to be reſtored, than in women advanced in years, in whom the blood is more acrid; and the relaxation of the *uterus* more difficult to be removed.

IV. Thoſe which ſhould be regarded as abſolutely incurable, are, 1°. The *fluor albus* of long ſtanding, eſpecially in women of a delicate conſtitution; or who are old, cacochymic, &c.

2°. The *fluor albus*, which depends on a *ſchirrus*, ulcer, or cancer of the *uterus*; or which has already degenerated into ſome of theſe diſeaſes: becauſe theſe diſeaſes themſelves are incurable.

3°. The *fluor albus*, which is attended with ſhooting pains in the *uterus*: becauſe theſe pains evince always a cancerous diſpoſition, or ſomewhat tending towards it.

4°. The *fluor albus*, which has brought the patient into a ſlow fever, *maraſmus*, *anaſarca*, or dropſy, from whence it is impoſſible to recover them.

V. In any caſe, 1°. It ſhould never be propoſed to ſtop the *fluor albus*, without having prepared the patients by remedies proper to evacuate the depraved humour, ſweeten the blood, and reſtore digeſtion.

2°. In any caſe, excepting only the *fluor albus* purely milky, which comes ſolely from the too great abundance of the uterine milk, it ſhould not be attempted to ſtop ſuddenly the diſcharge, for fear the humour retained may affect ſome more important part.

3°. In any caſe, it ſhould not be attempted to cure, even if it be practicable, the *fluor albus*, which is of long ſtanding, in women of a bad conſtitution, cacochymic, advanced in years, &c: for fear of throwing them into ſome diſeaſe ſtill worſe: but, in ſuch circumſtances, the palliative method only ſhould be perſued.

4°. The ſame method ſhould be followed in all the other caſes, where the *fluor albus* is incurable; and where, conſequently, the only reſource, that remains, is to render the diſorder more ſupportable.

§. VII. *Method of cure.*

As the *fluor albus* is of two kinds, either *milky*, or *lymphatic*; and theſe two kinds conſtitute two different diſeaſes; it follows, that the method of cure muſt be different alſo. It is proper, therefore, to treat of them in two ſeparate articles; and even a third may be ſubjoined to them, for the palliative cure of both kinds: when there is a failure of ſucceſs in curing them radically; or that the bad ſtate of the patients does not permit it.

Method of cure of the milky fluor albus.

The MILKY *fluor albus* depends on three cauſes: either on the too great copiouſneſs of the milky humour; the too great fluidity of it; or the too great relaxation of the orifices of the veſſels of the *uterus* deſigned to contain it.

I. If the milky humour be faulty only in being too abundant, which occaſions it to fill in too great a degree its veſſels, and forces their orifices to open too ſoon, in conſequence of which it runs out of them; in ſuch caſe, the neceſſary means of remedy are,

1°. To preſcribe to the patients a proper regimen; and to oblige them to be moderate, as to the quantity of their food; to reſtrain themſelves to the eating only ſuch aliment, as is in a ſmall degree nutritive; to uſe more exerciſe; to ſleep leſs; &c.

2°. To bleed them often; in order to diminiſh the quantity of blood, and humours; and always in the arm, to derive the courſe of the blood from the *uterus*.

3°. Frequent purges, to carry off a part of the chyle from the *primæ viæ* by ſtool: and, at the ſame time, and by the ſame means, to procure other evacuations, which may empty the veſſels by urine, and ſweat.

4°. To vomit them from time to time, in the ſame view; ſuppoſing the delicacy of their conſtitution, or the bad ſtate of their breaſt, does not render it improper.

5°. To

5°. To give them every day glyſters, of the decoction of the roots of birthwort; the leaves of mugwort or mercury; or the flowers of camomile, melilot, or motherwort; &c. to which is added, the oil of dill, or bays, in the proportion of an ounce, to render them carminative: or, they ſhould be made purgative, by diluting the pulp of *caſſia*, or ſome diaphenic in them; or by boiling in them, one or two drams of the leaves of *ſena*.

6°. Laſtly, if the diſorder continue obſtinate, to preſcribe diuretics or ſudorifics, in order to evacuate, by urine, or ſweats, a part of the too copious milky humour; or, at leaſt, diſſolvents, and aperitives, in order to attenuate this humour; and to put it in a ſtate to paſs from the lactiferous veſſels of the *uterus* into the lymphatic veins, which ſpring from them; and to follow, by this means, the ordinary courſe of the circulation of the lymph.

II. If the milky humour be too fluid, and eſcape inſenſibly through the orifices of its own veſſels, without any relaxation on their part, it is proper, in order to remedy this defect, to render it thicker by the following medicines.

1°. By the uſe of nutritive and incraſſating food; as good potages, boiled rice, gruels, boiled wheat, &c. prepared broths, or almond milk.

2°. By the uſe of aſſes milk, taken once or twice a day; or of that of cows, drunk in the ſame manner, morning and evening; or even taken as the whole food, if the ſtomach can bear it.

3°. By the uſe of ptiſans, proper to cauſe a more firm union of the parts of the blood; as the ptiſan of the roots of yellow mallows, water-lily, or comfrey.

4°. By a moderate uſe of narcotics, to make the patient ſleep; which will contribute very effectually to thicken the blood, and humours.

5°. By the uſe of abſorbents, or aſtringents; of which we ſhall ſpeak below in the following article; and among which, the moſt gentle, and leaſt ſtyptic, ſhould be choſen.

III. If

III. If the orifices of the lactiferous veſſels are too open, and cannot contain the milky humour, which paſſes into them, it is proper to endeavour to reſtore the elaſticity, by drying and ſtrengthing them, or by recloſing and contracting them.

In the firſt intention; that is to ſay, to dry and ſtrengthen them; muſt be employed,

1°. Baths, and ſtoops of thermal waters; eſpecially thoſe, which are bituminous, and ſulphureous.

2°. Pumping on the reins, loins, or *os ſacrum*, with the ſame water, which ſhould be repeated; but more or leſs often, according to the quality of the waters.

3°. Injections with the ſame waters into the *uterus*: or the fumes of theſe waters received by a funnel.

4°. The internal uſe of the ſame waters, in the proportion, and at the time, which is moſt proper, according to their qualities and ſtrength.

5°. Sudorifics, as viper-broth, for twelve, fifteen, or twenty days; or the ptiſans, and diet drinks, with guaiacum, ſaſſafras, china root, ſarſaparilla, &c. for fifteen days, three weeks, or a month.

6°. Diuretics; as broths, or ptiſans, with the root of parſley, *eryngo*, reſt harrow, &c. *millepedes*, Glauber's ſalt, the *arcanum duplicatum*, &c. for the time, that may be judged proper.

7°. In particular, the decoction of the roots of *aſarabacca*, and ſmallage; of which Galen[1] made uſe with ſucceſs, to cure the *fluor albus* of long ſtanding in the wife of Bœthus: and which held a place among the diuretics.

To effect the ſecond intention; that is to ſay, to cloſe, and contract the orifices of the lactiferous veſſels of the *uterus*; either vulneraries ſlightly aſtringent, which contract gently; or, aſtringents, ſimply, which have the ſame effect in a greater degree, may be uſed.

1°. The vulneraries, ſlightly aſtringent, are,

[1] Lib. *de Præcognit. ad Poſthumum.* Cap. 8.

ROOTS.

ROOTS.

Of black briony, — comfrey,	In ptiſan, or in decoction, from half an ounce, to an ounce in a pint of water.

LEAVES.

Of bugle, * — ſanicle, * — white daiſy, mint, ſage, * — wild tanſie, * — ladies mantle, golden rod, * — horehound, calamint, * — pennyroyal, roſemary, * — wintergreen, * — clary, — moneywort,	In ptiſan, decoction, or broths, from half a handful to a handful each doſe.

JUICES.

* Maſtic, * *Labdanum*, * Myrrh,	In powder, and in ſubſtance, from half a ſcruple to a ſcruple, or ſcruple and half.

WOODS.

Maſtic tree, Juniper tree,	In decoction, in the proportion of half an ounce, to a quart of water. In ſubſtance, and in powder, from one to two ſcruples.

BALSAMS.

BALSAMS.

* Of Peru, dry or liquid, — Tolu, * — *Capivi*, * — *Canada*,	By drops, from four to ten, rolled in sugar, powdered; or between two layers of syrup.
* Turpentine,	From a scruple to half a dram, diluted with the yolk of an egg.

2°. The pure astringents,

VEGETABLES.

ROOTS.

* Of bistort, * — tormentil, * — dropwort, — Solomon's seal, — pimpernel, — cinqfoil,	In decoction, from one ounce to an ounce and half, in a pint of water.

LEAVES.

Of plantain, * — dead nettle, * — yarrow, * — rupturewort, * — shepherds purse, * — horsetail, — *Thalictrum*,	In decoction, from half an handful, to two handfuls, in a quart of water. The clarified juice to two ounces.

FLOWERS.

* Balaustines, * Roses, red, or Provence, Spongy substance, growing on the wild rose, or sweet briar,	In decoction, half an ounce to the quart. In substance, two scruples in powder.

FRUITS.

FRUITS.

Acorns, baked in an oven with their *calyces*, * Galls, * Fruit of the ſumach tree, Dates, Shells of nuts,	In decoction, half an ounce to the quart. In ſubſtance, two ſcruples in powder.

JUICES.

* Dragons blood, * Maſtic, *Hypociſtis*, True *Acacia*, * *Terra Japonica*,	In ſubſtance, reduced to powder, from half a ſcruple to half a dram. In decoction, in double the proportion.

WOODS AND BARKS.

Sanders, Burnt cork,	In decoction raſped, in the proportion of an ounce to a quart. In ſubſtance powdered, from half a ſcruple to half a dram.

ANIMALS.

* Cuttle fiſh-bone, Head of a pike, Shells of eggs that have been ſat upon, * Ivory porphyriſed,	In powder, from half a ſcruple, to half a dram.

MINERALS.

* Prepared coral, * Amber, * *Terra ſigillata*, *Oſteocolla*, * Roch alum,	In powder, from half a ſcruple to half a dram.

PRAPARA-

PREPARATIONS.

Syrup of pomegranates,
——— — coral,
——— — red roſes,
——— — dried roſes,
——— — comfrey,
——— — nettle,
} In the doſe of one, or two ounces.

WATERS.

Water of ladies mantle,
——— — wild tanſie,
——— — yarrow,
——— — dead nettle,
——— — leaves of oak,
} In the ſame proportion, as the preceeding.

With theſe different medicines, properly choſen, and proportioned, may be made at will, and according to the taſte of the patients, ptiſans, apozems, broths, potions, juleps, boluſſes, opiates, powders, troches, &c. by following the rules neceſſary for the right formation of each kind of compoſition.

IV. Laſtly, if the cauſes of the milky *fluor albus* be complicated, two, or all the three claſſes together, it is proper, in ſuch caſe, to combine alſo the remedies, which are ſuitable to each claſs of the cauſes; in order to adapt the effects of the medicines to the ſtate of the diſorder.

Method of cure of the lymphatic fluor albus.

The LYMPHATIC *fluor albus* is owing to theſe two firſt cauſes; the tranſudation of the lymph through the coats of the veſſels deſigned to contain it, though theſe veſſels remain intire: or the efflux of lymph from its proper veſſels, when they are torn. On one hand, the firſt of theſe cauſes; that is to ſay, the tranſudation; proceeds from, that the lymphatic veſſels are too full of lymph, which ſtagnates there, either by the diſtention, which the bearing down of the

uterus

uterus cauſes; or by the obſtacle, which *ganglions*, tubercles, *ſchirruſſes*, or obſtructions of the *uterus* oppoſe to it. On the other hand, the other cauſe; that is to ſay, the efflux of the lymph; is always the conſequence of choppings, cuts, or lacerations, which happen in the interior coat of the *uterus*; and, conſequently, in the lymphatic veſſels, which ſupply it. In the cure, therefore, of the lymphatic *fluor albus*, attention muſt be given to three things. 1°. To the bearing down of the *uterus*: 2°. To the obſtructions, tubercles, *ganglions*, or *ſchirruſſes* of the *uterus*: 3. To the choppings, lacerations, or cuts of the interior coat of the *uterus*; and of the lymphatic veſſels, which are diſtributed there.

I. When the lymphatic *fluor albus* is cauſed, or continued, by the bearing down of the *uterus*, it is proper to employ, without delay, the remedies which are ſuitable to this diſeaſe; and which are found in *Chapter X. of Book II.* But, in waiting for the ſucceſs of them, an uterine circle muſt be uſed to ſupport the *uterus*. The diſorder is even ſometimes ſo great, that it cannot be hoped to obtain a radical cure; and there is no other reſource, than to endeavour to diminiſh the bad effect, and prevent the conſequences, by the continual uſe of the circle.

II. When the lymphatic *fluor albus* depends on obſtructions, tubercles, *ganglions*, or *ſchirruſſes* of the *uterus*, it is proper to attempt to cure, or diminiſh theſe diſorders, as much as may be; and to employ, to this end, diluents, and aperitives, either ſeparately, or together, according to the ſtate of habit of the patients. Theſe diluents will be amply treated of in the following articles, on occaſion of the palliative cure. As to the aperitives, and diſſolvents, although they have been already mentioned in *Chapters the IVth and VIIIth*, in ſpeaking of the *menſes* ſuppreſt, and of the *chloroſis*, the moſt uſeful remedies of this claſs will be enumerated here.

VEGETA-

VEGETABLES.

1°. ROOTS.

* Of *asparagus*, * — *eryngo*, * — reſt harrow, * — petty whin, * — madder,	From one ounce, to an ounce and half.
* — ſharp-pointed dock,	From half an ounce to an ounce.

LEAVES.

* Of wild ſuccory, * — pimpernel, * — harts tongue, * — agrimony, * — water creſſes, * — chervil,	From an handful to two.

ANIMALS.

* *Millepedes*,	Twenty, or thirty, to a quart.

SALTS.

* *Sal mirabilis Glauberi*, * *Arcanum duplicatum*,	From half a dram to a dram.

With which may be made ptiſans, apozems, and broths; which unite the qualities and advantages of diluents, and diſſolvents. In order to which, there is nothing more requiſite, than to chuſe the roots, leaves, or ſalts, which are moſt proper.

2°. GUMS AND RESINS.

* Gum Arabic, *Opoponax*, * *Galbanum*, *Sagapenum*, *Bdellium*,	From four grains to ten.

3°. PRE-

3°. PREPARATIONS OF STEEL.

* Saffron of Mars, * Ruſt of iron porphyriſed, * Saffron of Mars, prepared with water; or martial Ethiops, * Riviere's ſalt of ſteel,	From twelve to fourteen grains.
* Martial flowers,	From eight to ſixteen grains.

4°. MERCURIAL PREPARATIONS, *which do not purge.*

* Ethiops mineral prepared by heat,	Fifteen, or twenty grains.
* Factitious cinnabar,	From four grains to eight.

5°. ANIMALS.

Millepedes, in powder,	One or two ſcruples.

Of which, by chuſing two or three of the articles, may be compounded powders, boluſſes, opiates, and pills; that may be given with the broths, and apozems, mentioned above.

III. When the lymphatic *fluor albus* comes from lacerations, and choppings of the internal coat of the *uterus*; and of the lymphatic veſſels, which are diſtributed in it; uſe muſt be firſt made of agglutinative remedies, and farinaceous diet, to heal the divided parts: after which, recourſe muſt be had to vulneraries, to procure a ſound *cicatrix*.

1°. The agglutinative remedies are,

ROOTS.

* Of yellow mallows, * — comfrey, * — water lily,	One ounce.

LEAVES.

* Of mullein, * — purſlain, * — lettuce, * — borage, — *Cymbalaria*, or ivy-leaved toads flax,	One or two handfuls.

With which may be made ptiſans, broths, and apozems; to which may be added, hartſhorn or ivory ſhavings, in proportion of half an ounce to a quart.

2°. The farinaceous diet conſiſts of

Rice;
Gruel of barley, or oatmeal;
Pearl barley;
Boiled wheat;
Vermicelli;
Sago [1];

that may be uſed, as food, for the patients, during the firſt days; and to which ſhould be added, broths of fiſh, frogs, ſnails, and tortoiſes, when there is occaſion to ſweeten, and incraſſate the blood more effectually.

3°. INSPISSATED JUICES.

Labdanum, *Hypociſtis*, *Acacia*, * Dragons blood,	From ten to twenty grains.

[1] Sago comes from the Weſt-Indies. It is the pith of a kind of palm, which grows there, and is called *Toda Panna*. They fell theſe trees, when they are of a certain growth, ſplit the trunk, and take out the pith, which is in a large quantity. They beat it in a mortar, reduce it to a kind of paſte, and dilute it with water, which is paſſed over it. They let this water ſettle, and pour off the fluid from the ſediment, of which they form grains. Sago ſupplies a very light and very ſweetning nouriſhment; and may be dreſſed with broth or milk, at diſcretion.

GUMS

GUMS OR RESINS.

* Gum Arabic,
* Gum tragacanth,
Amber,
} From twenty to thirty grains.

Which may be employed, to compoſe boluſſes, opiates, or pills, that may be uſed together with the broths.

With relation to the vulneraries, thoſe, which are moſt recommended, will be found above, *page* 299, and the following: and it would be, therefore, uſeleſs to repeat them here.

IV. Laſtly, when the cauſes of the lymphatic *fluor albus* are complicated, two, or all three together, it is proper, in ſuch caſe, as we have ſaid with reſpect to the milky *fluor albus*, to combine together the ſuitable remedies for each of the cauſes, in order to oppoſe the whole force of the diſorder.

Method of palliative cure of the fluor albus.

It has been ſhewn above, §. *VI. Art.* IV. *and* V, which are the caſes, where no hopes ſhould be entertained of curing the *fluor albus*; and which, where it ought not to be undertaken to cure them, even if there were a proſpect of ſucceſs. It is proper, in ſuch circumſtances, to reſt ſatisfied with the palliative cure, deſigned to mitigate the violence of the diſorder, and to retard the effects of it.

In this view, 1°. A ſtrict regimen ſhould be preſcribed to the patients; and they ſhould be confined to potages, rice, and boiled wheat; permitting them to eat, at moſt, only a very little boiled or roaſted meat; and forbidding abſolutely all ſorts of ragouts, and the uſe of wine; or allowing them only as much as may be proper, to keep their ſtomach in order.

2°. To take care to purge them often; but with gentle medicines; compoſed of *caſſia*, tamarinds, rhubarb, manna, ſyrup of apples, compound ſyrup of ſuccory, or ſyrup of peach flowers, &c.

3°. To order, from time to time, bleeding in the arm; if the patients be young, or irregular in the *menſes*; or have a full pulſe; and eſpecially if they feel any pains in the *uterus*, or the *abdomen*.

4°. To make a free uſe of ſweetning, humectant, and diluent remedies; as,

Broths of chicken, veal, or frogs, with cooling herbs; ſuch as borage, lettuce, dandelion, pellitory of the wall, in the caſe of dry and lean perſons; but to which it would be well to add ſome craw-fiſh, in the caſe of patients of a phlegmatic conſtitution.

Apozems, and decoctions, with the roots of comfrey, and yellow mallows, ſorrel; leaves of lettuce, purſlain, and mullein; to which is added, ſome proper ſyrup, in the proportion of an ounce, or an ounce and half, to each doſe: theſe may be ſuch, as thoſe of violets, yellow mallows, and comfrey.

Clarified, and chalybeated whey; to which ſome add a ſpoonful or two of the depurated juice of chervil, dead nettle, or yarrow; and an ounce of lime water of the ſecond running.

Aſſes or goats milk, once or twice a day; or even that of cows, taken for the whole food, if the ſtomach can bear it.

Half, or whole baths of warm water, provided the breaſt be in a ſufficiently good ſtate to permit the uſe of it.

Laſtly, chalybeate mineral waters, drunk in a moderate quantity, but conſtantly for a long time: ſuch as the waters of Forges, Paſſi, or Spa.

Among theſe remedies, the broths, apozems, and even the whey, are proper in winter. The uſe of milk ſhould be confined to ſpring, and autumn; and the baths and mineral waters ſhould be principally recurred to only in ſummer: though, in preſſing caſes, theſe remedies may be employed in every ſeaſon.

5°. To preſcribe, according to the occaſion, ſlight narcotics; as the decoction of one or two heads of poppy; the ſyrup of *diacodium*, or of amber, in the doſe

doſe of three or four drams; liquid *laudanum*, in the doſe of ten, twelve, or fifteen drops; *laudanum*, in ſubſtance, in the doſe of a grain; pills of harts-tongue, or Starkey's, in the doſe of four or five grains; &c. augmenting theſe doſes, according to the exigence.

6°. To recommend to the patients, not only to waſh themſelves ſeveral times a day with a ſlight decoction of the roots of yellow mallows, or the leaves of mullein, or even chervil, in which is mixt a little lime-water of the ſecond running, or ſome drops of *aqua vulneraria*; but even to oblige them to make injections, at leaſt once every day, with the decoction of yellow mallows, barley-water, or whey well clarified.

7°. To forbid the patients, who are married, all commerce with their huſbands; or, at leaſt, to allow it ſparingly: and to adviſe them, alſo, againſt all kind of exerciſe, on foot, horſeback, or in a carriage; and to oblige them to lead a ſedentary life, and to keep themſelves almoſt always ſittting, or laid down.

8°. To propoſe to them, to ſuffer an opening, or two, to be made in their arms, by cauſtics; particularly in the caſe of thoſe who are of a phlegmatic habit; abounding in viſcid humours; very cacochymic; or advanced in years. It is often a ſerviceable remedy in theſe caſes: but I muſt confeſs, that it is ſo ſlow in its effects, and moreover ſo diſagreeable, that there are but few women, who will ſubmit to it.

Neceſſary cautions in the treatment of the fluor albus.

I. It ſhould never be attempted to cure the *fluor albus*, till after having endeavoured to correct, and purify the blood, by a proper uſe of diluting, and ſweetning remedies: ſuch as thoſe, which have been propoſed for the palliative cure.

II. It is even neceſſary to perſiſt a long time in the uſe of theſe preparatory remedies, if the *fluor albus* be of long ſtanding; if it happens to patients who are

in a greater degree cacochymic; or if it be of a more acrid, and corrosive quality.

III. Diluents, humectants, and sweetners, may be always employed with confidence in the treatment of the *fluor albus*, in the cases, where they appear to be indicated; because this cannot suppress the discharge suddenly; nor have any bad effect on the *uterus*.

IV. On the contrary, the use of aperitives, vulneraries, and astringents, cannot be entered on with too much circumspection, even in the cases where they are most proper: because they may suppress the discharge, with undue effect; or may bring an inflammation on the *uterus*.

V. To avoid these inconveniencies, prudence demands, that diluents be always joined with aperitives; humectants, with astringents; and emollients, with vulneraries.

VI. It is even necessary, for the greater safety, to moderate the action of these remedies; or, at least, the effect they may have on the *uterus*; by the moderate use of some narcotics, given in small doses.

VII. Notwithstanding these precautions, it is still proper, that care should be taken to leave off these remedies, whenever it is perceived, the *uterus* is heated, or becomes painful.

VIII. It may be easily judged, that, on these principles, the injections into the *uterus*, which are too astringent, can never be approved of: such are those made with the pomegranate bark, balaustines, or red roses; particularly, if alum, the *lapis medicamentosus* of Crollius; Verny's powder, or even dragons blood, be added.

IX. It is much better to permit fumigations from the flowers of sage, mint, milfoil, &c. or from mastic, *ladanum*, gum juniper, yellow amber, &c. provided they be only employed in relaxations of the *uterus*; and made in small proportions; and with the requisite precautions, not to introduce the fumes more than just warm.

X. Lastly,

X. Laſtly, the cure ſhould not be precipitately declared, on the meer ceſſation of the diſcharge: but it is proper to wait till the due courſe of the *menſes* be well reſtored in the women, who are of an age to have them yet, and the good health continue ſome time without any appearance of diſorder; or the other parts being affected by the humour.

Remedies recommended for the cure of the fluor albus; *but which cannot be uſed without danger in ſome caſes.*

I. Half a dram, or a dram of Venice turpentine, mixt with a ſcruple of rhubarb, in powder, in form of a bolus: after which a glaſs of acidulated ptiſan is to be drunk. This remedy is taken ten or twelve days together ſucceſſively. It purges gently; and ſtrengthens the elaſticity of the veſſels of the *uterus*. Riviere [1] aſſures us, that he has made uſe of it with good ſucceſs.

II. The ſyrup of the dung of an aſs. It is prepared, by infuſing four handfuls of the freſh dung, in a pint, or a pint and half of water. This infuſion is ſtrained; and preſſed from the dregs; and an equal weight of ſugar being added to it, it is made into a ſyrup, of which the doſe is an ounce every morning, for ſeveral days. This remedy has already been propoſed for the diſcharge of blood: but Bellonius [2] recommends it, alſo, for the *fluor albus*, as a remedy of admirable virtues.

III. A ſlight decoction of the kernels of the cones of the pine-tree, bruiſed with ſkill; and an ounce of miſletoe of the oak, raſped in two quarts of water, as the ordinary drink, for ſome time. This medicine unites the qualities of an agglutinant, and aſtringent. Dominique [3] Panarole boaſts this medicine, as an admirable remedy, that he had ſeveral times proved.

[1] Centur. 1. *Obſerv.* 46.
[2] Comment. *ad Hiſtor. II. Lib. II. Conſiliorum.*
[3] *Obſerv.* 48. *Pentecoſt.* 2.

The trial may be made of it without any inconvenience.

IV. Beef smoked, well dried at a fire, reduced to powder, diluted in half a glass of strong red wine, and taken in the morning fasting, in the dose of one dram for some days. This remedy has gained the approbation of [1] Forestus. It is in fact only a simple astringent; gentle enough; but which has nothing that can give it the preference to several other remedies of the same nature.

V. The decoction of the leaves of oak, in the proportion of five or six ounces; in which is diluted a dram of the scrotum of a hare; and which is taken fasting every morning, for ten days. [2] Mercurialis proposes this medicine as a remedy, which he has several times proved, in the *fluor albus* of long standing; and it is in reality a good astringent.

VI. The decoction of guaiacum, *China-root*, or sarsaparilla, or the decoction of these three drugs together, in form of a sudorific ptisan, in the dose of two glasses, every day: the one in the morning fasting; and the other in the afternoon, four or five hours after dinner. This decoction, or ptisan, is rendered purgative, when it is thought proper, by the addition of the follicles of sena; or of tamarinds, in a due proportion.

Nothing is more recommended in authors, who wrote about two hundred years ago: but I am much afraid, they have confounded the simple *fluor albus* with the venereal runnings, or virulent *gonorrhæas*. These decoctions, and ptisans, may be proper in these two disorders, in the case of fat and phlegmatic persons; but they are never so in the *fluor albus*, except in the circumstances mentioned above §. *VI. Art. III.* N° 5. *page* 294.

VII. The decoction of sopewort, which is prepared by boiling three handfuls of the leaves of this plant, two of those of dropwort, and one of those

[1] *Lib. XXVIII. Observ.* 16. [2] De Morbis Mulier. *Lib. IV. in Schol. Cap.* 7.

of

of the ivy-leaved toad flax, in nine pounds, or nine pints of water: which is to be reduced to six; and of which two glasses are to be taken, every morning, fasting.

This remedy has been recommended [1] by a celebrated empiric, called John Baptist Zapata; and it has, also, had the approbation of Lewis [2] Septale. But it is seldom used, unless in virulent *gonorrhœas*, which are become habitual. And it seems, that this disease should be understood to be meant by the *fluor albus* of which Zapata speaks: or, at least, it is so, that [3] David Spleisius, who has translated his work into Latin, and written a comment on it, has taken his meaning to be.

VIII. The decoction of millet in common water, known by the name of *Ambrose's decoction*, taken as the common drink, in form of a ptisan, and continued for several days. It is a gentle sudorific, or diuretic, which is proper in the cases, where the milky vessels of the *uterus* are too much relaxed: and it is evidently, in these cases, that [4] Mercurialis have proved the good effects of it, of which he speaks.

IX. Half a dram, or a dram of the conserve [5] of dead nettle, in Latin *Lamium*, swallowed in the morning fasting. One or two cupfuls of the infusions of the same flowers, in the manner of tea, may be given after it. Ray [6] approves of this remedy in the *fluor albus*; and it is true, that the dead nettle, in quality of a diuretic plant, is very proper to restore the elasticity of the *uterus*, when it is too much relaxed: as often happens in the *fluor albus* of long standing.

X. The tincture of myrrh, drawn with tartarised spirit of wine, and given in the dose of ten or twelve

[1] Li Maravigliosi Secreti di Medicina è Cirurgia. *Cap.* 9.

[2] Animad. *Lib. VII. Animadv.* 215.

[3] Under the title of *Mirabilia, sive Secreta Medico-Chirurgica, ... ex Italico idiomate in Latinum versa.* Ulmæ, 1696. in-8°.

[4] De Morbis Mulier. *Lib. IV. Cap.* 7.

[5] Joh. Bauhinus, *Histor. Plantar. Lib. XXVIII. Cap.* 119.

[6] *In Catalogo Plantarum Anglia.*

drops,

drops, in some proper vehicle, or in a bolus, for some days. Boerhave[1] praises this remedy much in the *fluor albus*; and it is good: but it is still more efficacious, when the tincture is made with Rabel's water, according to the process described in the treatise[2] on the venereal disease.

XI. Cows milk, with the cream taken off, and chalybeated, in the quantity of six or seven ounces; mixt with four ounces of the depurated juice of cresses; and taking in the morning fasting, for three weeks, or a month, with the usual precautions. It is, at the same time, a diuretic, and sweetning remedy; and proper, consequently, to correct the too great acrimony of the milky juice; and the too great relaxation of the vessels of the *uterus*, designed to contain it.

XII. The powder of the root of dropwort, diluted in a glass of decoction of the wild parsnip, *Pastinaca sylvestris tenuifolia*, *C. B. P.* This remedy is recommended by Simon[3] Paulli, as approved in cases of the *fluor albus*, which are of long standing, and obstinate: and it has gained the approbation of Needham, and Herman Corbeus, cited by Ray[4].

XIII. The decoction of the flowers of melilot, of which a glass is taken in the morning fasting for some time. It is a remedy proposed by a German physician[5], of which use may be made without danger.

Remedies proposed for the fluor albus; *but suspicious, and even dangerous.*

I. Some authors advise, in the *fluor albus*,[6] camphor in substance, reduced to powder; and given in the proportion of half a dram; or the half[7] of a nutmeg toasted, and powdered. The camphor, or the nutmeg is to be diluted with an ounce and half, or two ounces, of

[1] Chim. *Proceſſu.* 57.

[2] *De Morbis Venereis. Lib. IV. Cap.* 12. *p.* 534. Second Edition.

[3] *In quadripart. Botanico.*

[4] Hiſtor. Plantar. *Tom. I.*

[5] Johannes Michaëlis, *in not. in Schroderum.*

[6] Wolfgangus Hoeferus, *Hercul. Medic. Lib. VII. Cap.* 1. Jean Liebaut, *De la ſanté, fécondité & Maladies des Femmes. Liv. II. Cap.* 35.

[7] Hieronymus Reuſnerus. *Obſerv.* 101.

roſe

roſe water; or the diſtilled water of water lily; and it is to be taken, in the morning, faſting, for ſome days together.

But a blind confidence in theſe remedies ſhould be avoided. Medicines of this nature, that is, ſuch as are attenuating, aromatic, and ſpirituous, ſhould never be employed in the *fluor albus*; but with great circumſpection: becauſe they are only proper in caſes of relaxation of the veſſels of the *uterus*; and they cannot be preſcribed, even in thoſe caſes, with ſafety, but to women, who are fat, and abound in viſcid humours; and, even with them, prudence requires, that they ſhould be in ſmaller doſes than thoſe mentioned.

II. I am not of opinion, that a more favourable judgment ſhould be formed of the *fecula* of briony; which a German phyſician [1] gave in the doſe of a dram, in the following troches.

℞ *Fæculæ Bryoniæ*, ʒj.
Seminis Papaveris albi, ʒij.
Myrrhæ, ʒiß.
Cum Saccharo in aquâ Ceraſorum nigrorum ſoluto. F. Rotulæ.

The *fecula* of briony is an emmenagogue, of which the action on the *uterus* is too powerful; and may, conſequently, produce bad and even inflammatory repletions in it; particularly in the caſes where there is no hopes of exciting the *menſes*: and theſe caſes are very numerous in the women, who have the *fluor albus* of long ſtanding.

III. A yet more ſevere judgment ſhould be paſſed on the water, broached under the name of *Eſculapius's water*, by a [2] phyſician, or rather Spaniſh empiric; who had, however, reputation in his time. To prepare this water, vinegar is put into a cucurbit of copper, tinned on the inſide; which is covered with a leaden head; and a diſtillation is then made in the common manner. The liquor, which comes over ſweet, and of

[1] Gothofredus Samuel Poliſius, *Myrrholog. Sect. IV. Cap.* 13. *Artic.* 3.

[2] Giovan Battiſta Zapata. *Li Maravigliosi Secreti di Medicina è Cirurgia, Cap.* 13.

a gold-

a golden yellow colour, is the water of Eſculapius, in queſtion: of which it is propoſed, to give, in the morning faſting, two or three ounces, for ſeveral days: and this is boaſted as an excellent remedy for ſeveral diſorders; and particularly the *fluor albus*, when of the longeſt ſtanding, and moſt exceſſive.

But this medicine is too ſuſpicious to be employed without imprudence. It is in fact only diſtilled vinegar, which is become ſweet in taſte, and of a golden yellow colour, ſolely by being charged with many particles of lead, which it has ſeparated from the head, in the diſtillation. It is to theſe particles of lead alone, that the virtue, which is attributed to this water, can be aſcribed: and it is the lead, which ſhould deter from the uſe of it: if a little attention be given to what has been ſaid above, *page* 253, of the danger, there is, in employing internally, ſolutions, or preparations of lead.

IV. I conceive, I could not diſpenſe with the not taking notice here of ſome remedies againſt the *fluor albus*, which are found in a diſſertation on this diſorder, joined to a treatiſe, intitled, *Sequel of the Deſcription of the Venereal Diſeaſe*; and of declaring freely the judgment, I believe, ought to be made on them. As this diſſertation is printed with *approbation* and *privilege*; and treats on the ſubject with the appearance of much confidence; there is room to fear, that it may make ſome impreſſion on perſons, who are ignorant in theſe matters; and induce them to adopt theſe remedies, if means be not uſed to acquaint them of their qualities. This is the firſt of theſe pretended remedies.

" Put into an earthen pot, *ſays the author of the* " *Diſſertation*, a pound of good corroſive ſublimate, " and three quarters of the filings of iron; leave the " earthen veſſel in the cellar, taking care to ſtir the " contents well every day; and, when the whole " is diſſolved in form of a paſte, let the matter be " thrown into a caldron of water, and the ſcum taken " off with an iron ſpoon, and put on blotting paper, " in order to ſeparate the fluid from a powder, which

" it

" it will leave; and which is to be dried, in order to " be uſed, every third, or fourth day, in the doſe of " five or ſix grains, with the ſame quantity of Aleppo " ſcammony. This medicine is to be taken in a ſpoon- " ful of ſope, and dinner is to be eaten after it, as " uſual; or it may be taken in the evening before " ſupper. Thoſe, who do not like to take it in pow- " der, may incorporate it in the *confectio-hamec*. This " medicine is a good diſſolvent; and acts very gently, " exciting two or three ſtools."

It is eaſy to judge, that, in this preparation, the greateſt part of the corroſive ſublimate is united to the parts of the filings; and remains ſtrongly combined with them; in ſuch manner, that the powder, which remains on the blotting paper, contains as much ſublimate as filings. In giving ſix or ſeven grains of this powder, the quantity is given, therefore, every doſe, of about three grains, or three grains and a half, of corroſive ſublimate.

V. The ſecond remedy, that is recommended, is, perhaps, yet more dangerous. Nevertheleſs, *of all thoſe which*, the author pretends, *he had made uſe of for twenty years*, that he ſays, *he had occaſion to ſee theſe kinds of diſorders* (fluor albus) *it is this*, as he aſſures us, *which has always appeared to him moſt uſeful in theſe diſeaſes*.

" Take half a dram of good corroſive ſublimate, " eighteen grains of red precipitate, eighteen grains " of *mercurius dulcis*, and half an ounce of crude " mercury. Triturate well the corroſive ſubli- " mate, and the crude mercury, together, in order " to deſtroy the corroſive power of the ſublimate. " Add afterwards the red precipitate, and the *mer-* " *curius dulcis*: and triturate the whole again, to mix " them all together. Put then gradually to the maſs, " ſtill conſtantly triturating it, half a dram of the " mother-of-pearl, half a dram of cinnamon, and five " drams of Aleppo ſcammony. Mix the whole to- " gether, and form the maſs into boluſſes, with ſyrup " of quinces. There may be given of theſe boluſſes, " from twenty to thirty grains."

If

If these bolusses be prepared, according to the direction, there ought to be in the quantity of thirty-six grains, which are prescribed as a dose, only twelve grains of syrup of quinces, and the powders must make the remaining twenty-four grains. On this supposition, there would be in each dose, one grain and a third of corrosive sublimate, and two thirds of a grain of red precipitate; as much *mercurius dulcis*; five grains and a third of crude mercury, and thirteen grains and one third of scammony. I question whether the addition of the crude mercury may sufficiently dulcify the corrosive sublimate and the red precipitate, to render the use of such a remedy safe.

VI. In order to promote the effect of this medicine, the author advises, that the following purgative syrup should be alternately given along with the bolusses.

"Take six drams of agaric, and the same quantity "of sena; boil them together in three pints of water, "till one third be consumed. Take then a pint of "*aqua vitæ*, a pound of sugar, and six drams of "Aleppo scammony: and put them together, into "an earthen pot, over a chafing-dish: and stir them, "in order that they may be as much burnt as possi- "ble: let the fluid cool, strain it through a sieve, "and mix it with the other infusion. This syrup is "to be given in the dose of from six spoonfuls to "eight."

Certainly this author does not apprehend the effects of the Aleppo scammony. He puts thirteen grains and a third in substance, into every dose of the bolus, mentioned above, and here he gives eight spoonfuls; that is to say, at least four ounces of a syrup, which contains, on a just calculation, the tincture of twenty-seven or thirty grains of the same scammony, without reckoning the decoction of sena, and the agaric; which enter over and above into this composition. I doubt, whether in a hundred women, who are subject to the *fluor albus*, there would be found two, who could bear the repeated operation of so many, and such purgatives: especially, if they were already weakned by

by the diſeaſe, as always happens in the *fluor albus* of long ſtanding.

VII. This is not all yet. The author pretends, that the uſe of the following balſam ſhould be added to theſe medicines.

"Take ſix pounds of henbane with its root, the "ſame quantity of hounds-tongue with its root, four "pounds of the leaves of tobacco, and twenty-five "quarts of wine: boil the whole together five or ſix "hours; and then take out the herbs, and roots. "Strain off the fluid; and, having put it into another "veſſel, add to it five quarts of good virgin oil. Boil "the whole together, till the oil and wine no longer "ſimmer. Then let it cool; and pour off the fluid "gently. There are ſome, who, in giving the bo- "luſſes, *N°V*, and alternatively a doſe of the purgative "ſyrup, *N°VI*, order to be taken, in the intervening "days, when the purgatives are omitted, a ſpoonful "or two of this balſam; which, *added he*, I have "myſelf very often done."

It ſeems as if this author had endeavoured to collect every thing that is moſt to be ſuſpected in the *materia medica*. To the internal uſe of corroſive ſublimate, which no perſon has dared to employ, he adds here a ſtrong decoction of henbane, and tobacco; that is to ſay, of two plants, of which the internal uſe is eſteemed to be highly dangerous.

VIII. There is found, in this treatiſe, a letter from a learned perſon, whom he does not name: but whom, he ſays, a knowledge in natural philoſophy and anatomy have rendered diſtinguiſhed. This anonymous learned perſon, whoever he may be, reſembles much the author. At leaſt, he follows the ſame principles; and pretends, that corroſive ſublimate is an internal ſpecific for the *ſcrophula*: and, not to dwell on what does not relate to our proper ſubject the adviſes, in the *fluor albus*, to make injections into the *vagina*, with the *lac mercurii* of the *Pharmacopeia* of Baltus. It is true, he deſires, that this remedy ſhould be weakened, by putting four ounces of fluid, on each dram of the

corroſive

corrosive sublimate: but, he adds, that it is surprizing, in how little time these virulent discharges will be stopt by it.

The *lac mercurii*, of which the author speaks, is described in Bates's Dispensatory: which he means by the *Pharmacopeia* of Baltus. According to Bates, to make this *lac*, six drams of corrosive sublimate must be dissolved in twelve ounces of water of fumitory; which is in the proportion of [1] a dram to two ounces. Bates observes nothing of the use of this *lac*: but is satisfied with referring to what he has said elsewhere on the use of mercurial water: but, in the article of this water, he mentions, that it is good for pimples, pustulas, and redness of the face; *Ad faciei ruborem, pustulas, &c. curanda, certissima aqua.* He does not ascribe any internal use to it: and with regard to external application, he even takes notice, that the skin should be only touched, in a very slight manner, with drops of this water; and that they should be immediately wiped off with a piece of linnen. *Tange loca sæpè cum guttulâ minutissimâ statim exsiccando cum linteo.* Concerning which it is to be observed, that this mercurial water, of which Bates speaks, is only composed of two drams of corrosive sublimate, dissolved in one pound of an emulsion, made with the decoction of lily roots; that is to say, it is twice as weak as the *lac mercurii* of the anonymous author. Nevertheless, Bates, who knew the nature of this water, proposes it only as a cosmetic, for external use; and directs, that places of the skin, which are affected, should be only touched with very small drops; and that care should be taken to wipe them off immediately. How then has the learned anonymous person, who seems to have taken Bates for his guide, had the temerity to propose to inject into the body, and in parts so delicate as the *uterus* and the *vagina*, syringefuls of the solution of corrosive sublimate, twice as

[1] Bates puts only two ounces of water of fumitory to each dram of corrosive sublimate, to make his *lac mercurii*.

2 strong

ſtrong as the mercurial water of Bates; and, conſequently, twice as cauſtic.

IX. Dr. Morgan, an Engliſh phyſician, aſſures [1] us, "that the tincture of *cantharides*, given in a ſtrong "decoction of guaiacum, is ſerviceable in the *fluor* "*albus*, when it is recent: but that when it is of "long ſtanding, recourſe muſt be had to mercurial "remedies."

It is certain, that this tincture has been propoſed for virulent *gonorrhæas* by ſome authors: as has been ſaid in the treatiſe *De Morbis Venereis*, Tom. I. p. 272 and 499: and there is room to believe, that Dr. Morgan only propoſes it for the *fluor albus*, becauſe he confounds that diſorder with a virulent *gonorrhœa:* as he ſeems to explain, in adviſing the uſe of mercurial remedies in the *fluor albus*, when it is of long ſtanding. But if that be the caſe, he has fallen into two errors; the one, in ſuppoſing, that the *fluor albus* does not differ from the venereal diſeaſe: for it is very certain, that they are different: the other of courſe in ſuppoſing, that the tincture of *cantharides* is proper, as well in a virulent *gonorrhœa*, as in the *fluor albus:* for it has been remarked, in the place of the book before cited, that the uſe of this tincture was not only to be ſuſpected, but that it was even dangerous in a virulent *gonorrhœa:* and this remark holds good, in a yet ſtronger degree, with relation to the *fluor albus*.

[1] *The Mechanical Practice of Phyſick*. Lond. 1735. in 8°.

See the *Eſſais & Obſervations de Médecine de la Société d'Edimbourg*, tranſlated into French by M. Demours, doctor of phyſic, *Tom. IV. pag.* 629.

CHAP. XI.

Of the ceſſation of the menſes; *and the accidents which it may bring on.*

§. I. DESCRIPTION.

THE *menſes*, which do not begin till a certain age, ceaſe in the ſame manner at a certain period: and as the time, when they begin, is not always the ſame; ſo that, when they ceaſe, varies alſo in different ſubjects, different conſtitutions, different countries, and different circumſtances: but in general, the women begin to be irregular, and to loſe them, about the forty-fifth, or the fiftieth year of their age.

Sometimes the *menſes* ceaſe all of a ſudden, without there having preceded any ſign of their diminution: which is however rare. Sometimes they ceaſe gradually; that is to ſay, they become at firſt leſs copious; grow ſlower afterwards; fail after that once or twice; then re-appear again; and, at laſt, ceaſe intirely. Sometimes theſe variations only laſt for a ſhort time: and ſometimes they continue for ſix months, a year, or two years.

In ſome women, the *menſes* ceaſe without any accident, or with ſuch as are ſo ſlight, that they do not merit any attention. In others, the ceſſation brings on very ſtrong hyſteric fits. In ſome there happen floodings, that are long, obſtinate, and dangerous. In others a *fluor albus*, which is difficult of cure, is left.

Laſtly, there are women, who, in loſing their *menſes*, are ſubject, at the ſame time, or at leaſt ſucceſſively, to ſeveral of theſe accidents; but differently combined: that is to ſay, ſome have hyſteric fits, and floodings: others floodings, and the *fluor albus*: and others the *fluor albus*, and hyſteric fits. There are alſo inſtances

inſtances of thoſe, who even have them all, ſometimes ſucceſſively, and ſometimes together.

§. II. CAUSES AND SYMPTOMS.

It is a conſtant property of the elaſtic fibres of all the ſolid parts of the body, to grow hard, and callous with age. This occaſions the loſs, in advanced years, of the fine colour of the ſkin, and the freſhneſs and delicacy of the complexion: and it is from thence, the wrinkles, dryneſs, and calloſity of aged perſons proceed. In ſhort, this is the principle of the changes, which ſhow, and accompany old age.

The fibres of the *uterus*, and the coats of all the veſſels which ſupply it, are liable to the ſame changes: and even if this principle were not ſo general, there would be reaſon to admit it with relation to the *uterus*, from the inſtance of the breaſts; which have an evident correſpondence with it, as well in ſtructure, as in its functions: and which, as is known, ſink and fade in women, about the forty-fifth, or fiftieth year of their age.

It may, therefore, be regarded, as a conſtant fact, that about the forty-fifth, or fiftieth year, the *uterus* cloſes itſelf, and contracts; that the lactiferous veſſels ſink, grow leſs, and can no longer receive the milky humour, which they before ſeparated; that the veinous *appendices* cloſe in the ſame manner, not being capable of opening, either to receive the blood, which is turned from them, or to ſuffer it to be evacuated into the cavity of the *uterus*; and, therefore, that the *apparatus*, or neceſſary mechaniſm for menſtruation, on the part of the *uterus*, ſuch as is explained above, *Chapter II*, is then intirely wanting.

For this reaſon, the *menſes* muſt naturally ceaſe about the forty-fifth, or fiftieth year, by a natural conſequence of the changes which age produces in the lactiferous veſſels, and veinous *appendices* of the *uterus*. Though theſe changes are numerous, and may happen in different manners, and with different circumſtances, as it is eaſy to judge by the variations, that have been

remarked in the accidents, which precede, or accompany the ceſſation of the *menſes*, in different ſubjects, they may, nevertheleſs, be eaſily referred to four claſſes, or principal ſtates.

Firſt ſtate of the uterus.

In this ſtate, the lactiferous veſſels, being cloſed, do not permit, or but in a ſmall degree, the entrance of the milky humour; are not, or but in a ſmall degree, filled with this humour: do not, or but in a ſmall degree, compreſs the neighbouring uterine veins; and do not, or but in a ſmall degree, turn the blood into the veinous *appendices*: while, at the ſame time, theſe *appendices*, on one hand, weakly dilated by the ſmall proportion of blood which paſſes into them; and, on the other, too much cloſed by the elaſticity of their fibres; open but in a minute degree; or not at all: which occaſions, that the *menſes*, after having diminiſhed for ſome time, ceaſe at laſt intirely.

In this ſtate, 1°. Sometimes the period of the *menſes* maintains itſelf; but the quantity diminiſhes. The period of the *menſes* maintains itſelf, becauſe the lactiferous veſſels of the *uterus* are yet ſufficiently dilatable, to permit the entrance of the milky humour, and, by this means, to tumefy yet ſufficiently to procure the regular return of them, in the ſpace of a month. But, at the ſame time, the quantity of them is diminiſhed; becauſe the veinous *appendices*, being cloſer, reſiſt more to their dilatation; and only open imperfectly.

2°. Sometimes, in the reverſe of the firſt caſe, the quantity of the *menſes* is maintained, but the period becomes longer. The quantity is maintained; becauſe the veinous *appendices* are ſtill ſufficiently open for the common diſcharge of the *menſes*, but the period becomes more long: becauſe the lactiferous veſſels, which are more denſe, admit with more difficulty the entrance of the milky humour: and have need, for this reaſon, of a longer ſpace of time to be ſufficiently full.

3°. Some-

3°. Sometimes the quantity of the *menſes* diminiſh, and the returns grow more diſtant; which implies the preſence of both the two preceding caſes: and this affords a proof, that the lactiferous veſſels, being too much cloſed, have more difficulty in dilating themſelves; and that the veinous *appendices* have, at the ſame time, more repugnance to open.

4°. There are women, with whom the *menſes* gradually diminiſh, and the intervals grow longer, little by little, and uniformly; and there are others, in whom theſe diminutions, and intervals, vary irregularly. In the firſt caſe, the cloſing of the lactiferous veſſels, and the veinous *appendices* of the *uterus*, augments proportionally; and the blood preſerves an uniform motion: whereas, in the other, the veinous *appendices* cloſe themſelves unequally, through the effect of ſome foreign cauſe: or, at leaſt, the blood is agitated by ſome irregular motion.

5°. In ſome women, the ceſſation of the *menſes* is protracted to ſix months, a year, two years, &c: becauſe this time is neceſſary, in order that the veſſels of the *uterus* cloſe itſelf ſufficiently; and this is common in women of a ſanguine or phlegmatic conſtitution; and for the moſt part the beſt: becauſe nature has, by that means, more time to habituate itſelf to the ceſſation of the *menſes*.

6°. In other women, the *menſes* ceaſe more quickly; which happens in thoſe of a bilious or melancholic conſtitution; and frequently brings on them bad accidents: becauſe the *menſes* being too ſuddenly ſuppreſt, the body finds itſelf loaded with a troubleſome *plethora*.

7°. When the *menſes* ceaſe by a cotemporaneous, and proportionable cloſing of the lactiferous veſſels, and veinous *appendices* of the *uterus*; or, at leaſt, ſuch as is moderately uniform and equal, there is no accident to be feared, with reſpect to the *uterus*: becauſe it does not occaſion repletion. The moſt that happen is, 1°. Some diſguſt to food; or ſome deſire for odd things; when the milky humours abound in the blood; and are mixt with the *ſaliva*, or the leven

of the ſtomach. 2°. Some pains in the head, and ſome ſenſe of choaking; when the blood, retained by too quick a ceſſation, overloads the veſſels of the head, and lungs; and produces there a *plethora*.

This firſt ſtate happens in the women, in whom the *uterus* is in a natural ſtate, well formed, and exempt from any fault.

In whom all the veſſels, all the coats, and all the fibres of the *uterus* have an elaſticity nearly equal.

In whom the *menſes* ceaſe of themſelves, by the meer courſe of nature, without any fortuitous or foreign cauſe.

And in whom, conſequently, the lactiferous veſſels, and the veinous *appendices* of the *uterus*, cloſe themſelves by their own elaſticity, and grow narrower uniformly and proportionably.

Second ſtate of the uterus.

In the ſecond ſtate, the lactiferous veſſels of the *uterus* being yet ſufficiently ſupple, permit the entrance of the milky humour; tumefy; compreſs the neighbouring veins; and, ſtopping the blood there, force it to turn off into the veinous *appendices*, which grow full with it: but the orifices of theſe lactiferous veſſels, as well as thoſe of the veinous *appendices*, reſiſt opening; becauſe they are more cloſe; which occaſions the veſſels to ſwell in vain, and prevents the *menſes* from appearing; although, in other reſpects, every thing ſeems to be properly diſpoſed for it.

In this ſtate, 1°. The women feel the approach of the *menſes*, as if they were going to appear; as the lactiferous veſſels, and blood-veſſels of the *uterus*, tumefy, as in the time of common menſtruation.

2°. The inconveniencies, which precede, or accompany the *menſes*, are then more long, more obſtinate, and ſometimes more ſtrong, than in the natural ſtate: becauſe the veſſels not being capable of emptying themſelves, remain tumefied a longer time; and ſometimes even in a greater degree than commonly.

3°. When

3°. When the ſenſations raiſed in ſuch caſe in the *uterus* are very great, and lively, they bring on the true hyſterical vapours: or, at leaſt, the accidents which belong to them; as redneſs, and heat, which often riſe ſuddenly into the face, and end in momentary ſweats; convulſive choakings; ſtrangulations of the breaſt; contractions of the *diaphragm*; creeping in the bowels; involuntary crying, or laughing; &c.

4°. Theſe accidents diminiſh gradually, and become inſenſibly more weak, and rare; becauſe the lactiferous veſſels, and the veinous *appendices*, conſtantly grow more cloſe; and yield every month leſs to the dilatation: which occaſions them to be leſs replete. It happens, nevertheleſs, frequently, that theſe accidents continue for a year or two, though not with the ſame violence.

This ſecond ſtate is common to women, who have the orifices of the lactiferous veſſels, and the veinous *appendices*, naturally more cloſe and denſe, than the lactiferous veſſels, and the veinous *appendices* themſelves.

To the women, in whom the internal coat of the *uterus* is too firm, and nervous; and in whom, conſequently, it cloſes too ſtraitly the orifices of the lactiferous veſſels and veinous *appendices*, which it embraces, and paſſes acroſs.

Eſpecially in the women, who have never had children, or but few; and in whom, for this reaſon, the lactiferous veſſels, and the veinous *appendices*, have been leſs dilated; and have remained, conſequently, leſs dilatable.

Third ſtate of the uterus.

In this third ſtate, the lactiferous veſſels are full of milky humour; becauſe they are yet ſufficiently ſupple to admit of being dilated: but they do not empty themſelves; becauſe their orifices, being more cloſed, reſiſt being opened. By this means, the veſſels, being too full, compreſs the neighbouring veins; ſtop the courſe of circulation in them; turn the blood into the

veinous *appendices*; and force them to open a paſſage into the *uterus:* which produces a flooding, ſometimes more copious, and ſometimes leſs.

In this ſtate, 1°. The flooding is conſtant, and obſtinate; becauſe the lactiferous veſſels, which remain full, always compreſs the veins; and turn the blood from them into the veinous *appendices*; which are, by this means, compelled to remain open.

2°. The flooding is not only obſtinate, but it increaſes periodically every month; becauſe the lactiferous veſſels, which tumefy more periodically every month, compreſs, at that time, the veins more ſtrongly; and obſtruct more, in them, the direct courſe of the blood, which is forced to turn off more abundantly into the veinous *appendices*.

3°. The tenſion, which the tonic tumefaction of the lactiferous veſſel cauſes in the coats of the *uterus*, brings on often accidents of the hyſterical vapours: ſuch as thoſe, which have been ſpoken of in *the ſecond ſtate of the uterus*, n° 3.

4°. Although theſe floodings are obſtinate, they ceaſe at laſt of themſelves; becauſe the lactiferous veſſels diminiſh gradually; and being diminiſhed, reſiſt the entrance of the milky humour, with which they no longer become full; and therefore do not compreſs any longer the veins; nor obſtruct the circulation of the blood.

5°. But theſe floodings, in ceaſing often, leave a lymphatic *fluor albus*; which comes from the ſlight diviſions or choppings, that remain at the extremities of the veinous *appendices*, even after they have been cloſed: and from whence the lymph is diſcharged, till they be perfectly conſolidated.

6°. Sometimes theſe floodings even degenerate into ulcers of the *uterus*; when the diviſions, or choppings, of the orifices of the veinous *appendices* come to ſuppurate; and the ſuppuration is acrid and corroſive.

This third ſtate is common in women, with whom the orifices of the veinous *appendices* are more lax, than thoſe of the lactiferous veſſels. In

In women, with whom there are in the *uterus* places naturally more weak; and where the veins, and particularly the veinous *appendices*, are varicous.

In the women, who have been often delivered, or who have had long, laborious, and difficult labours; and in whom the veinous *appendices* have been often relaxed and torn; and the *uterus* even unequally weakned in places, where the *placenta* has adhered.

Laſtly, in women, who in the firſt or ſecond ſtate of the natural ceſſation of the *menſes* above deſcribed, have been let blood in the foot imprudently, to bring back the *menſes*, as if they had been ſuppreſt by diſeaſe.

Fourth ſtate of the uterus.

In this laſt ſtate, the lactiferous veſſels of the *uterus* continue to receive the milky humour; but, in receiving it, ſuffer it to be diſcharged into the *uterus*; through their orifices, which remain open, and dilated; or which are eaſily dilatable. On which account, they do not tumefy, compreſs the veins, obſtruct the courſe of the blood, turn it into the veinous *appendices*, force them to open; or, in ſhort, cauſe the eruption of the *menſes*.

In this ſtate, 1°. The women have no diſcharge of blood; but they are ſubject to a conſtant *fluor albus*, which augments periodically every month, in the time of the *menſes*; becauſe at that time the milky humour is ſeparated more copiouſly.

2°. As the veſſels of the *uterus* do not tumefy, nor act on the coats of the *uterus*, the women are not expoſed in this ſtate to any accident of the hyſterical vapours; but they fall into a waſting of fleſh, and *maraſmus*, by the continuance of the *fluor albus*.

3°. Sometimes the diſorder even degenerates into an ulcer of the *uterus*: when the milky humour, in conſequence of being diſcharged, relaxes, and at laſt erodes the orifices of the lactiferous veſſels; and even ſometimes the interior ſurface of the *uterus*; particularly

larly in women with whom this humour is acrid, and corrosive.

4°. Notwithstanding which, provided the women be naturally healthful, and manage themselves well, it often happens, that this discharge ceases gradually, in proportion as the *uterus*, and the lactiferous vessels, close themselves.

This state happens commonly in women of a phlegmatic and viscid constitution, who have been subject to a constant *fluor albus*; and in whom the orifices of the vessels are greatly relaxed.

In women, who have the texture of the *uterus*, and particularly that of its interior coat, too lax, either by natural conformation: or by the disorders which preceding pregnancies have caused in the part.

Lastly, in the women, with whom aperitives and emmenagogues have been improperly employed to bring back the *menses*, which have ceased naturally; and of which the cessation has been mistaken for a suppression.

Compound states of the uterus.

To the four simple states, which have been explained, several other compound states must be added, which result from the combination of the simple states, at least of the three last, when they concur at the same time, and in the same patient, although in different parts of the *uterus*. But after what has been said of the simple states, it is sufficient to enumerate these compound states in a few words; and to mention the principal symptoms of them.

Thus, 1°. When the second and third states concur together, the women are exposed to all the symptoms of these two states; that is to say, they have the hysterical vapours, as in the second state; and floodings, as in the third.

2°. In the concurrence of the second and fourth states, the women have hysterical vapours, and the milky *fluor albus*; that is to say, the symptoms of those states.

3°. When

3°. When the third ſtate concurs with the fourth, the women have diſcharges of blood, and the *fluor albus*, either milky, or lymphatic; which cannot be diſtinguiſhed, when they happen together, and the diſcharge of blood is copious; but which may be eaſily diſtinguiſhed, as ſoon as the diſcharge of blood ceaſes, or diminiſhes.

4°. Laſtly, in the concurrence of the ſecond, third, and fourth ſtates, which is very rare, though not impoſſible, the women are expoſed, at the ſame time, to hyſterical vapours, diſcharges of blood, and the *fluor albus*; that is to ſay, to all the ſymptoms which are proper to each of theſe three ſtates ſimply.

Theſe different compound ſtates happen, when the cauſes, which give riſe to the ſimple ſtates, concur together, and act at the ſame time upon different places of the *uterus:* and, in order to judge of them, nothing more is required than to weigh the degree of affinity, which the different cauſes of the ſimple ſtates of the *uterus* may have; and to deduce from thence the different caſes of poſſible combination, which may reſult from them.

§. III. DIAGNOSTIC.

I. The diagnoſtic of the ceſſation of the *menſes* is confined, to the diſtinguiſhing the ceſſation which age brings on from the ſuppreſſion of the *menſes*, from that which is owing to diſeaſe, and from the ſuppreſſion, in conſequence of pregnancy, with which it may be confounded.

1°. It is diſtinguiſhed from the ſuppreſſion, owing to diſeaſe, 1°. Becauſe the natural ceſſation happens only about the forty-fifth, or fiftieth year; whereas, the ſuppreſſions happen at all ages. 2°. Becauſe the ceſſation ſcarcely ever happens ſuddenly, but gradually, and with intervals: whereas, the ſuppreſſions are commonly ſudden, and abſolute. 3°. Becauſe the ceſſation is generally without accident, or with ſuch only as are ſlight: whereas ſuppreſſions have generally worſe conſequences.

When

When women are ingenuous, with reſpect to their age; when all theſe ſigns; or, at leaſt, ſeveral, concur together; and when it is known, how to form a right judgment of them, there can ſcarcely remain any uncertainty, with reſpect to the nature, and cauſe of the ceſſation of the *menſes*. There is no caſe, where the uncertainty will continue long; and the conſequences not evince in a month or two, whether the ceſſation ought to be aſcribed to the ſimple courſe of nature; the bringing on the termination of the *menſes*; or to the effect of ſome accidental cauſe, which ſtops the *menſes* againſt natural order.

2°. It is not eaſy, to diſtinguiſh the natural ceſſation of the *menſes* from the ſuppreſſion of pregnancy; and accordingly the women often deceive themſelves with reſpect to this matter. Thoſe who have no children; who wiſh to have ſome; and who approach their forty-fifth, or fiftieth year; miſtake for pregnancy all the ceſſations of the *menſes* which happen to them, from time to time; and which forerun the abſolute ceſſation. On the contrary, thoſe, who have had ſeveral children, and who are unwilling to have more, miſtake, the natural ceſſation of the *menſes*, for real pregnancies.

It is well known, indeed, that, in general, women have diſguſts, odd longings, pains, heart-burn, diſpoſition to vomit, and even frequent vomitings, from the firſt month of pregnancy; that the breaſts become then more hard, full, and firm, and the belly, on the contrary, more flat, and ſunk, &c; but it is alſo known, that theſe accidents, or at leaſt ſuch as approach to them, happen ſometimes in the natural ceſſation of the *menſes*, when it is ſudden, and laborious: and this authorizes, or confirms the doubt: nevertheleſs, this uncertainty, whatever deluſion they endeavour to lead themſelves into, cannot continue a long time; and the fourth or the fifth month will afford certain information. For then they will either feel the child more; and, in that caſe, the reality of the pregnancy can no longer be diſputed; or, if no motion

motion of the child be felt, it muſt be allowed, there is no pregnancy; but that the *menſes* have ceaſed naturally.

Fortunately the doubt cannot ſubſiſt, either in this, or the preceding caſe, more than ſome months: nor be injurious to the patients. The natural ceſſation of the *menſes* ſcarcely requires any medicines: nothing more is neceſſary, than to bleed ſometimes in the foot, and to give ſome ſtomachics. But theſe remedies are proper both for the ſuppreſſion of the *menſes* by diſeaſe, and by pregnancy. Pregnancy indeed never requires any other: and as to ſuppreſſions, which have generally need of more active remedies, ſuch as purgatives, and aperitives, the uſe of them may be deferred for ſome months without danger, till time has been had to be informed of the true cauſe, which occaſions the failure of the *menſes*.

II. The diagnoſtic of the different kinds of ceſſation of the *menſes*, whether ſimple, or compound, is evident; and in order to confirm it, there is nothing requiſite, but the queſtioning the patients.

1°. The firſt and moſt natural kind of ceſſation, is when there is neither ſwelling, tenſion, nor pain in the *uterus*; and when it does not bring on any accident, or ſuch only as ſlight *plethoras*, and the *chloroſis*.

2°. The ſecond kind of ceſſation is, when the periodical diſpoſition of the *menſes* is ſhewn every month, by the tumefaction, tenſion, and pain of the *uterus*; by the greateſt part of the accidents of the *chloroſis*; and, what is yet more ſtrong, by hyſteric fits.

3°. The third kind of ceſſation is, when periodical floodings, which ſometimes, in conſequence of continuing, become conſtant; and are generally accompanied with hyſterical vapours, diſguſts, and odd likings.

4°. The fourth kind of ceſſation is, when the women are expoſed to an obſtinate and conſtant *fluor albus*, which increaſes periodically, and brings on at length, if neglected, weakneſs, and *maraſmus*.

5°. Laſtly, there are compound kinds of ceſſation, when the ſymptoms, which happen, belong to ſeveral

of

of the ſimple kinds; and form new combinations, which may vary in different manners.

III. The diagnoſtic of the different ſtates of the *uterus*, and of its veſſels, in the ceſſation of the *menſes*, muſt be deduced from the nature, and kind of each ceſſation, according to the theory, which has been propoſed.

Thus, in the firſt kind of ceſſation, it may be taken for granted, that the lactiferous veſſels, and the veinous *appendices* of the *uterus*, cloſe themſelves equally, and uniformly; and reſiſt, at the ſame time, to the entrance of the milky humour and blood.

In the ſecond kind, it is evident, that the lactiferous veſſels, and veinous *appendices*, ſtill dilate, and receive as uſually the milky humour and blood: but that their orifices, being too much cloſed, reſiſt conſtantly to their paſſage out.

In the third, every thing is in the ſame condition, as in the ſecond; except that the orifices of the veinous *appendices* yield at laſt; open, or are lacerated; and ſuffer the blood to be copiouſly diſcharged into the *uterus*.

In the fourth, the orifices of the lactiferous veſſels open, and ſuffer all the milky humour, which paſſes into them, to eſcape into the *uterus*: which cauſes an obſtinate *fluor albus*.

Laſtly, in the kinds of ceſſation, the moſt compound, the nature and the qualities of the accidents which accompany them, are ſufficient to indicate the moſt compound ſtates of the lactiferous veſſels, and veinous *appendices* of the *uterus*.

§. IV. PROGNOSTIC.

I. The ceſſation of the *menſes* about the forty-fifth or fiftieth year, is a diſpoſition of nature, or a neceſſary conſequence of the conſtructure of the body; and particularly the *uterus*; and, of courſe, cannot be regarded as dangerous in itſelf. All the hazard, which attends it, ariſes always, either from its happening too ſoon, or from its happening with accidents.

II. The ceſſation happens too ſoon, when it happens at thirty, thirty-five, or forty years; or when it happens even at forty-five, or fifty, through any caſualty; as ſome fright, vexation, miſcarriage, &c.

In this caſe, the ceſſation is never free from danger, either becauſe there is room to fear, that the lactiferous veſſels, and the veinous *appendices* of the *uterus*, will not be cloſed, and diminiſhed, equally, and uniformly; or becauſe the milky juice, which abounds not only in the caſe of a premature ceſſation, but in ſuch as is ſudden, may bring on bad accidents.

III. The ceſſation happens with accidents, when it brings on violent vapours, cauſes conſiderable floodings; and leaves after it a conſtant *fluor albus*; or appears to threaten the *uterus* with ſome repletion, *ſchirrus*, cancer, or ulcer; &c. In all theſe caſes, the greatneſs of the danger may be judged of by the nature, number, and violence of theſe accidents, which make the prognoſtic almoſt infinitely various.

IV. It is by theſe accidents, which are peculiar to each kind of ceſſation of the *menſes*, and which attend them, that the prognoſtic belonging to each kind muſt be regulated.

Thus, 1°. As in the firſt kind of ceſſation, there being no accident, with reſpect to the *uterus*, every thing is confined to the conſequences of a *chloroſis*, and *plethora*, which may be eaſily corrected; and as the patients are not even expoſed to hyſteric fits; at leaſt, not to ſuch as are very great; this kind is not attended with any danger, or, at moſt, only with ſuch as is very ſlight.

2°. As in the ſecond kind of ceſſation, the patients have, to a very great degree, all the accidents of a *chloroſis*, and *plethora*; and are expoſed to hyſterical vapours, which haraſs and alarm yet more; as there is reaſon to fear every moment, an uterine *hæmorrhage*, or a copious *fluor albus*; and, as it often happens, that this kind of ceſſation leaves obſtinate repletions, or ſchirrous obſtructions in the *uterus*; it is eaſy to judge,

judge, this kind of ceſſation muſt be much more dangerous than the preceding.

3°. As in the third kind of ceſſation, there are all the accidents of the *chloroſis*, *plethora*, and hyſteric fits; and theſe accidents, when they are long and obſtinate, frequently produce *ſchirruſſes*, and obſtructions in the *uterus*: and as there is, moreover, in this ceſſation, a conſtant flooding, which is always followed with a conſiderable loſs of ſtrength, and often brings on an ulcer or cancer of the *uterus*; this kind of ceſſation muſt be regarded as ſtill more dangerous than the two former.

4°. In the fourth kind of ceſſation, the conſtant and obſtinate *fluor albus*, which is proper to it, threatens a conſumption, and ſlow fever; and even an ulcer, and cancer of the *uterus*. In this kind of ceſſation, therefore, the danger is ſcarcely leſs great than in the third.

5°. With regard to the more compound kinds of ceſſation of the *menſes*, the danger muſt be eſtimated by the number, nature, and violence, of the ſymptoms, which accompany them; or by the nature of the diſeaſes, which they may bring on.

§. V. *Method of cure.*

The manner of treating the accidents, which happen in the ceſſation of the *menſes*, does not differ from that of treating the ſame accident in other caſes. Thus *Chapter XIII. of Book II. of the hyſteric paſſions, or vapours*, may be conſulted for the cure of the accidents, relating to the hyſteric affections, which are common in the ſecond kind of ceſſation: *Chapter IX. of this book, of the exceſſive menſes*, for the cure of the flooding, which may happen in the third kind: and *Chapter X. of the ſame book, concerning the fluor albus*, for the cure of the *fluor albus*, which is peculiar to the third kind: and in all theſe ſeveral caſes, recourſe muſt be had to the treatment propoſed in theſe chapters, obſerving all the precautions which are there directed.

By

By this means, the method of cure, belonging to this Chapter, is reduced to the manner of treating the firſt kind of ceſſation of the *menſes*; or, to ſpeak more properly, to the manner of preventing the accidents in the women, who begin to loſe the *menſes*; or remedying them, when they are moderate; do not conſtitute particular diſeaſes, and are only ſlight ſymptoms of hyſterics, *plethora*, or the *chloroſis*.

In general, when the women have reaſon to believe they are beginning to loſe the *menſes*, they ſhould, if they be prudent, take care of their health with the greateſt precaution: and this is doubly neceſſary, if the ſtate of the *uterus*, or the blood, give any room to apprehend any bad conſequence from the ceſſation.

To this end, 1°. It is proper to bleed often, for at leaſt a year; and ſometimes for two; in order to diminiſh the volume of the blood, which regurgitates in the veſſels; and this ſhould be always in the foot, to derive the blood from the *uterus*. It is difficult to make any preciſe determination, with relation to the number of bleedings: becauſe there are women, who require to be let blood every month, and others, for whom twice a year is ſufficient. But commonly the bleeding ſhould be repeated from three months, to three months; and even ſometimes from two months, to two months; according to the habit, and the manner of living of the women, who loſe the *menſes*.

2°. It is proper to preſcribe an exact regimen; as well for the quantity, as the quality of the food. For the quantity, in order that the women, by eating leſs, may make leſs blood, and leſs milky humour. For the quantity, that, by taking food which is light, aqueous, and not too nutritive, ſuch blood and milky humour may be produced, as is leſs thick, and capable of being obſtructed in the veſſels of the *uterus*.

3°. It is neceſſary to purge from time to time, with gentle purgatives, ſuch as tamarinds, manna, caſſia, rhubarb, the vegetable ſalt, Epſom ſalt, &c. in order to cleanſe the firſt paſſages; and carry off, by the ſalts,

a part of the chyle, which forms the milky humour in the blood.

4°. It is proper, in all cafes, to put them in a daily courfe of fimple remedies, with warm water, or the decoction of mugwort, motherwort, or melilot, &c. There may be added, two ounces of oil of fweet almonds, or an ounce of fine catholicum; or an ounce of the pulp of caffia; if the belly be not loofe. But if the patient be troubled with wind, there may be an ounce of bays; or a glyfter may be given with a decoction of bay-berries.

5°. It is proper to make the patients take daily, or, at leaft, frequently, flight diuretics, in order to cauſe the milky humour to be difcharged by urine: fuch are the infufions of maiden-hair, tea, fage, balm, the vulnerary herbs of Swifferland; or flight decoctions of chervil, motherwort, mugwort, &c: and fuch, alfo, are the cooling and diuretic mineral waters; as thofe of Forges, Paffi, &c.

6°. It is proper even to employ diuretics ſtill more efficacious, in cafe the accidents fhould be more ſtrong; and, in this view, there may be added to the infufions and decoctions, a dram, or a dram and a half, every day, of *ſal mirabilis Glauberi*, *arcanum duplicatum*, and *ſal prunellæ*, or tartar vitriolate; or even to paſs theſe infufions, or decoctions, over twenty *millepedes* pounded, and reduced to paſte.

Laſtly, if the hyſteric fits be frequent, and momentous, it is proper to make the patients take ſmall ſpoonfuls of anti-hyſteric potions, compoſed of diſtilled waters of the three nuts, black cherries, or flowers of the lime-tree; or there may be added to four ounces, twenty, or thirty drops of tincture of myrrh, and the ſame quantity of tincture of caſtor; or ſome grains of *aſſa fætida*, may even be diſſolved in it; or ſome drops of anodyne tincture mixt, if the accidents of the diſorder be ſtrong, and attended with convulſions, or convulſive ſymptoms.

Neceſſary

Neceſſary precautions in the treatment of women who are loſing their menſes.

I. It is always proper to avoid bleeding in the foot, at the time of loſing the *menſes:* becauſe it derives the blood into the ramifications of the *aorta deſcendens*; which ſurcharges the veſſels of the *uterus* that come from it; augments the tumefaction and the tenſion of the *uterus*; aggravates the accidents of the hyſteric diſorder; and even often cauſes uterine hæmorrhages.

II. For the ſame reaſon, all uſe of emmenagogues, diſſolvents, aperitives, and thermal waters, ſhould be avoided: becauſe it is by no means proper to endeavour to bring back the *menſes*; which it is fit ſhould ceaſe. When this conduct is not perſued, all that is done, far from relieving the patient, tends commonly only to increaſe the diſorder; and to bring on floodings that are difficult to be cured.

III. It is not ſufficient to diminiſh the quantity of food; but it is farther neceſſary, as has been already remarked, to forbid all kind of diet, which may furniſh a nouriſhment too ſucculent; and which may produce a chyle too oily, and thick: ſuch are beef, mutton, partridges, too nouriſhing preparations of rice, too ſtrong broths, gelatinous ſoops, milk, chocolate, &c.

IV. From the ſame principle, it is neceſſary to ſhun every thing which may heat, or agitate the blood; and conſequently make it rarefy; becauſe rarefaction produces nearly the ſame effects, as *plethora*, in the veſſels of the *uterus*. On this account, women ought to be forbid, at this time, ſitting up all night, too lively paſſions, too great exerciſe, the uſe of ſpirituous liquors, and even of wine, unleſs in a very moderate degree; as, alſo, of coffee, and chocolate, particularly made with vanelloes; &c.

V. As coition puts the fibres of the *uterus* into ſtrong, and tonic contractions, which, by turning the courſe of the blood, oblige it to ſtagnate in the veſſels, and veinous *appendices* of the *uterus*; and

force them to open; the uſe of it, eſpecially if frequent, cannot but be injurious in the ceſſations of the *menſes*, which are laborious; and eſpecially in thoſe, which are attended with floodings.

VI. If the women are ſubject to any conſtitutional infirmity, whatever it may be, or whatever part of the body may be affected by it, they muſt expect to ſee it renewed, or augmented at the time of loſing the *menſes:* and it is material to apprize them of it before hand, that they may be leſs alarmed, and ſubmit more willingly to the remedies, which are preſcribed, and the regimen which is directed.

VII. In general, it were to be wiſhed, the change ſhould be made quickly, provided it be made without accidents, as happens in the women of good conſtitution, and in whom the *uterus* preſerves an equal elaſticity, in all its parts. But when the ceſſation is laborious, or accompanied with any accident of conſequence, it is advantageous, that it ſhould be made ſlowly, and gradually, in order that the veſſels of the *uterus* ſhould have time to cloſe themſelves equally, and that nature may habituate herſelf to the want of the *menſes*; at leaſt, nothing ſhould be done, which may urge forwards the diſpoſitions of nature, and force the veſſels of the *uterus* to irregular cloſings, capable of bringing on repletions.

VIII. When more compound caſes offer, in the ceſſation of the *menſes*; in which floodings, a *fluor albus*, repletions in the *uterus*, and uterine colics, hyſteric diſorders, &c. ſometimes happen, it is proper to weigh and eſtimate the cauſes and danger of theſe accidents; and to reſolve, either to endeavour to overcome them one after another, by beginning with the moſt dangerous, or the moſt urgent; or all at the ſame time, by conjoining, if that be practicable, the different remedies, which are proper for each accident in particular.

IX. Laſtly, it is proper to be apprehenſive of the *menſes* which perſevere after fifty years. I have ſeen women, who had paſſed that age, and boaſted of having

having their *menſes* ſtill, as young women. But, on examining them, I always found that thoſe *menſes* were a true ſtate of diſeaſe; and aroſe either from ſome exulceration, or repletion of the *uterus*; or from ſome varicous diſpoſition of its veins: and the greateſt part of theſe women, with whom the *menſes* laſted ſo long, were carried off by cancers, or ulcers of the *uterus*.

It is much the ſame with the girls, who are ſaid to have the *menſes* when they are nine or ten years old, and who have really periodical diſcharges at that age. It is almoſt always the effect of ſome fault in the *uterus* or the *vagina*, which muſt be cured by repeated bleedings, and the uſe of cooling broths, or whey; or aſſes milk, and half baths. So much is it true, that nature, variable, as ſhe appears in the particulars of the circumſtances, is more conſtant than is believed, with reſpect to the eſſential rules of the animal œconomy.

CHAP. XII.

Of the furor uterinus, *or* Μητρομανία.

THE furor uterinus *is a diſeaſe, which is ſhameful, and offenſive to modeſty; but, happily, it is rare: though not to ſuch a degree, as that it ſhould be ſtruck out of the number of diſeaſes incident to women; or omitted by phyſicians, who undertake to treat of them: which has for the moſt part been done, as will appear below. I have, therefore, thought it a neceſſary part of this work.*

§. I. DESCRIPTION.

The *furor uterinus*, in Greek Μητρομανία, never comes on ſuddenly; but, with an imperceptible progreſs, gains ground by ſlow degrees, in the following manner.

I. It ſometimes happens, that virgins, ripe for the embraces of men, if they be exceſſively enamoured of any lover whom they cannot have; that girls habituated to venereal proſtitution, by which they are unwillingly warmed; that married women, who are coupled with impotent, or old men; and that young widows, who are deprived of able and vigorous huſbands, to whom they had been accuſtomed; have intenſe, ſtrong, frequent, and even continual luſtful thoughts: which are conſtantly augmented by reading romances, fraught not only with tender, but laſcivious images of love that they impart; repeating lewd verſes; talking very often with their companions of venereal enjoyments; exciting themſelves, by wanton touches, with their fingers, or ſuffering it to be done by others; liſtning readily to the fond and incentive ſpeeches of men; eating diſhes that are ſalt, ſpicy, and acrid; and uſing, or rather abuſing, rich wines, ſpirituous liquors, coffee, and chocolate: all which, increaſing the acrimony of the blood, inflame venereal deſires.

Theſe circumſtances are, in the beginning, of little conſequence; but if they continue, they grow momentous. Their thoughts remain fixed on the ſame object continually, from which they cannot be diverted; every thing gives way to it, and nothing elſe is perceived or attended to. Sad and penſive, they keep ſilent, or mutter to themſelves; carefully diſſembling, and concealing, to the utmoſt of their power, the luſt with which they burn. But if any handſome young man, or, indeed, any man whatever, come in their way, they eagerly view him with laſcivious looks; and, if he ſays any thing careſſive, as is uſual, they greedily hear it; ſmile pleaſantly; evince their inclination by expreſſive geſture; take in ſerious meaning what is only ſaid in joke; and yield not only to the moſt faint attack, but even, on their own ſide, make advances.

II. The diſeaſe, already too great, gains ground every day. Stimulated with a boundleſs and raging deſire

deſire of venery, and loſing all ſenſe of ſhame, they utter things expreſſive of the greateſt lewdneſs; openly declare themſelves; and laying aſide every degree of modeſty, their reaſon being depraved, they incite all they meet, either acquaintance or ſtrangers, to their embraces, by the moſt impudent and vile words. If they find any heſitation made, they allure by voice and geſture: and if they meet with an obſtinate refuſal, they ſcold loudly in opprobrious language, and endeavour, as much as they can, to fight, with their fiſts, thoſe who provoke them by their non-compliance.

III. Hitherto this diſeaſe, though conſiderable, reſtrains itſelf within the bounds of melancholy *delirium:* but in a ſhort time it burſts out into a raging madneſs. Diſtracted to the laſt degree, they roar and talk the moſt abſurd things: endeavour to excite the luſt of byſtanders, by motions, geſtures, and words. Sometimes, in order to incite more effectually, they pull off their cloaths, and ſhow themſelves naked: and they throw themſelves with fury on thoſe, who are unwilling, or unable. They evidently rave in ſpeaking of many things, if not of all. They have at the ſame time all the ſymptoms which commonly attend madneſs: as *agrypnia*; *anorexia*; heat all over the body; patience of cold; abſence of thirſt, while they burn with heat; blackneſs of the ſtools; and urine that is thick, ſmall in quantity, ſaffron coloured, clayey, &c.

It muſt not, however, be imagined, that all theſe ſymptoms are found together in every patient, or even in any at the ſame time; each ſymptom varies in a different manner in each ſubject, according to the habit, natural diſpoſition, and education, of the patient; and the vehemence of the diſeaſe; ſo that this diſorder, always uniform and ſimilar in what is eſſential to it, is various and diſſimilar in all other circumſtances.

This diſeaſe, however rare, occurs more frequently in warmer climates; where the energy of the cauſes,

by which it is brought on, is more powerful. It is, therefore, a matter of wonder, that [1] Hippocrates, Galen, Celſus, Aretæus, Orobaſius, and Paul Æginetus, who wrote of medicine in Greece and Italy, ſhould not take the leaſt notice of it. But a ſtill greater cauſe of admiration ariſes from the total ſilence, with reſpect to it, of the phyſicians who lived betwixt them, and our time, before the revival of letters: eſpecially of thoſe, who were inhabitants of a warmer climate; where the diſeaſe muſt formerly, as well as at preſent, have been more common: [2] as Arnold De Villeneuve, Valeſcus de Tarenta, Bernard Gordon, and William Rondoletius, amongſt the *Narbonnenſes:* and Anthony Guainerius, and Alexander Benedictus, among the [3] Italians; by whom, while they explained the other diſeaſes of women, this ſeems to be deſignedly omitted: as if they were unwilling to ſpeak of any diſorder, of which the antients had made no mention.

Soranus, a Greek phyſician, who lived in the reign of Trajan, a little before Galen, is the only one, as far as I know, who has expreſsly ſpoken of the *furor uterinus*. His writings are indeed loſt: but Aëtius confeſſes, that *Chapter* 74, of *Book the XVI.* of his work *De Contractâ ex Veteribus Medicinâ*, in which this diſorder is treated of, was taken from him. This chapter of Aëtius is indeed intitled *De Furore uterino*, but as this title was given to it by Janus Cornarius, who tranſlated Aëtius into Latin; and whoſe verſion

[1] There are, however, one or two places to be found in Hippocrates, and Galen, in which, if they be taken in a favourable ſenſe, this diſeaſe ſeems to be either named or alluded to.

[2] All theſe places, among other kinds of *delirium*, mention the raving love of men in women, in particular chapters: but not γϱῦ, indeed, or *de furore uterino*, among the diſeaſes of women, which they explain.

[3] It is very extraordinary, that Alexander Benedictus ſhould be ſilent, with relation to the *furor uterinus*, in the place where he treats of the diſeaſes of women; when he relates an obſervation of a woman, who had an uterine madneſs, *Libr. I. Cap.* 28. *de Inſaniâ, pag. m.* 49.

was

was publiſhed by Frobenius at Baſil; I thought proper to have recourſe to the Greek original, that I might know with certainty the genuine word, by which Aëtius, or rather Soranus himſelf, whom he tranſcribed, named this diſeaſe in the Greek: in ſetting about which, I took upon me a difficult and laborious taſk. For Aëtius's work contains ſixteen books, of which only the eight firſt are publiſhed by Aldus and Aſulanus at Venice, in *folio*, in the Greek, in the year 1535: and the other eight latter remain yet unpubliſhed. But it happened luckily for me, that there were four entire Greek copies of Aëtius, in the royal library: and I loſt no time to examine them with the greater aſſiduity: from whence I diſcovered, that the title, Aëtius has given this chapter, is περὶ τῆς Μητρομανίας.

I then recollected, that the ſame word had been uſed by Nicholas Myrepſus, Alexandrinus, in whom there is an antidote that, he [1] ſays, avails againſt the *metromania:* by which name the *furor uterinus* is, doubtleſs, to be underſtood: the ſame is to be found in Zonara, a Greek hiſtorian, who relates in his *Annals, Vol. III. page* 23. "That Euſebia, the wife of the "emperor Conſtantius, the ſon of Conſtantine the "Great, was celebrated for her beauty; but unhappy "on account of her huſband, who was debile by na"ture, as well as by diſeaſes; and unfit for venery. "On which account, gradually pining away, ſhe died "before Conſtantine, never having had any child: "and as ſome, indeed, ſay, ſhe was ſeized with a *furor* "*uterinus*, which killed her; καὶ μητρομανίας νοσήματι "περιπεσοῦσα ἐξέλιπε."

There are ſome other names of this diſeaſe. Thus by [2] Moſchion, a later Greek phyſician, but of uncertain date, it is called [3] *Satyriaſis:* and by others later

[1] De Antidotis, *Sect. I. Cap.* 218.

[2] *De affectibus muliebribus*, Cap. 128.

[3] A name leſs proper; and borrowed from a ſimilar affect in men.

ſtill,

ſtill, *Nymphomania*, which means the *mania* of the *clitoris*, that was formerly called *Nympha*: or *Erotomania*; which is, *Mania amoris*. But we have avoided employing theſe terms, becauſe they are not received into common uſe.

§. II. CAUSES.

It is obvious, that two diſeaſes are conjoined in the *furor uterinus*; an exceſſive inclination to venery, which depends on the diſordered ſtate of the *uterus*; and a *delirium* at firſt melancholic, and afterwards maniacal, which depends on the diſordered ſtate of the brain. If both occur together, they conſtitute the *furor uterinus*: which is the preſent ſubject of conſideration. If one be wanting, it will be either an unbounded inclination to coition, without any *delirium*; or a ſimple melancholy, or *mania*, without any exceſſive deſire of venery. To explain, therefore, from thence, the nature of the *furor uterinus*, muſt be ſpoken of in order, 1°. The unbridled deſire of venery ſimply. 2°. The ſame conjoined with a melancholic *delirium*. 3°. Laſtly, the ſame when it ariſes to a *mania*.

Firſtly, The exceſſive inclination to coition is brought on by a more vivid, and ſtrong ſuccuſſion of the organs, which are the ſeat of venereal pleaſure in women: much in the ſame manner, as intenſe hunger, or thirſt, ariſe from a more powerful impreſſion made on the ſtomach or throat. But the organs, which are deſigned by nature to excite venereal pleaſure, are many.

1°. The *clitoris*, which, according to the general opinion, is the ſeat of the moſt exquiſite pleaſure: from whence it is called *amoris dulcedo*.

2°. All the extent of the *vagina*; as is manifeſt: but chiefly the anterior part of it, which is connected with the *vulva*, and is the ſtraighteſt.

3°. The internal ſurface of the *uterus* itſelf, which is ſenſible of pleaſure, and incites to venery, in like manner,

manner, as in intenſe hunger and thirſt, it is certain, the ſtomach partakes of the ſenſe of want of meat or drink. What is here ſaid of the perception of deſire in the *uterus*, is confirmed by the obſervation, that, in the females of other animals, venereal inclination ceaſes on their firſt becoming pregnant: and it abates much, likewiſe, in women under the ſame circumſtances; the ſenſibility of the *uterus* being diminiſhed.

4°. All the veſſels, which are employed in ſecreting the ſeminal humour, ought, alſo, to be enumerated amongſt thoſe that conduce to venereal deſires: becauſe they partake of the pleaſure. They are, 1°. The *proſtata*, which ſurrounds the *urethra* of women; and copiouſly diſcharges a ſecreted humour from two ſmall orifices, or *lacunæ*, at the ſides of the *urethra*, in the ſuperior part of the *vulva*, under the *clitoris*. 2°. Cowper's Glands, which are ſituated in the *peritoneum*, reſembling an *iſthmus*, lying betwixt the *anus* and *vulva*; and open by two ducts at the beginning of the *vagina*, near the roots of the *carunculæ myrtiformes*. 3°. Many glands, either diſperſed, or conjoined in bunches, with which the ſurface of the *vagina* is overſpread: from whence it is certain, that an humour, viſcid in a leſſer degree, analogous to the *ſemen*, is excreted. 4°. Various imperceptible *lacunæ*, diſperſed over the ſurface of the *vagina*; from whence a limpid and ſubviſcid humour flows, but in a ſmall quantity. 5°. Laſtly, various excretory orifices diſtributed over the internal ſurface of the *uterus*, from which a copious quantity of unctuous humour, which moiſtens the cavity of the *uterus*, flows out during the act of coition.

This being granted, as it cannot indeed be controverted, it reſults, that women may be greatly affected by the more vivid impreſſions on the organs; and by that means more irritated to venery, from three cauſes. 1°. If the ſuccuſſions, which ought to be imparted to the organs above mentioned, in order to excite venereal ſenſation and deſire, be ſtronger. 2°. If the peculiar diſpoſition of the organs, neceſſary for

receiving thoſe ſuccuſſions, be ſo great, that they may receive them more vividly. 3°. Laſtly, if, from the concurrence of both theſe cauſes together, ſtronger motions are communicated to the organs, and received by them more vividly: from whence the venereal ſenſation, and deſire, muſt be increaſed in a double *ratio*.

I. The ſuccuſſions, by which venereal deſire is kindled in women, may be reduced to three kinds. 1°. To the gentle friction of a certain degree and kind, of the abovementioned organs, by which they are titillated. 2°. To gentle and pleaſing irritations, by which they are ſtimulated. 3°. To gentle motions, of a certain and determinate degree of force, by which they are contracted. But what the degree or ſpecies of theſe motions ſhould be, in order that the venereal ſenſation may reſult from it, cannot be defined by any certain *ratio*. It is only obvious, that they differ from thoſe other motions of theſe parts, of which pain is the reſult: as the motions, which bring on hunger and thirſt in the ſtomach and throat, differ from thoſe of the ſame parts from whence pain ariſes.

But the maſtuprative frictions of women are not to be reckoned here: becauſe they are made by exterior means, which do not produce a *furor uterinus*: and, therefore, it is only proper to inquire into two other cauſes; to wit, the irritations, and gentle motions, which are almoſt reſolvable into the ſame: and which are brought about by the *ſemen*, or ſeminal humour, flowing into the *vulva*, *vagina*, and *uterus*, and the cavities communicating with theſe parts.

But theſe irritations, or gentle motions, are more vivid, and therefore ſtimulate more ſtrongly to venery. 1°. If the *ſemen* and ſeminal humours abound in quantity. 2°. If they be faulty in the too great degree of acrimony. 3°. If, at the ſame time, they be redundant in quantity; and faulty in the too great degree of acrimony.

1°. They

1°. They are redundant in quantity, when the blood itſelf, from which they are produced, is too copious in the body: as in women,

Who live well, and plentifully; and eat ſoops, and compound diſhes. *In general*, ſays St. Jerom, [1] *every kind of luxury, and ſtuffing of the belly, are the ſources of venereal inclination.*

Who lead an indolent and ſedentary life, from whence the perſpiration is more ſparing; by which a ſufficient quantity of blood fails of being diſſipated.

Who have the organs, deſigned by nature for the ſecretion of *ſemen*, larger, and more open, by their original conformation, from whence a more copious ſecretion of that humour is made.

Who, by a more frequent commerce with men, and repeated titillations of women, have a more plentiful diſcharge of *ſemen*. Thus it is univerſally known, that by repeated ſuction, the milk is more copiouſly ſecreted in the breaſts; and, by repeated ſpitting, the *ſaliva* in the ſalival glands.

2°. The *ſemen* is faulty by a preternatural acrimony in women,

Who are of a bilious, or an atrabilious habit; and whoſe blood being acrid, muriatic, and ammoniacal, affords *ſemen* of the ſame qualities.

Who feed on meats, that are ſalt, ſpicy, dried with ſmoke, and acrid: who drink rich wines, or ſpirituous liquors; and who indulge themſelves in chocolate, and coffee, that are particular incentives to venery.

Who augment the heat and acrimony of the blood, by ſitting up late, or by vehement paſſions of the mind; whence it is inflamed.

3°. There is a concurrence of both the faultineſſes of the *ſemen*; to wit, redundance, and acrimony; whenever the cauſes, by which each is brought on, happen together: of which, indeed, as it is manifeſt, if not all, at leaſt the greateſt part, do happen together from the affinity of cauſes.

[1] In *Epiſtolâ ad Furiam.*

II. The

II. The peculiar diſpoſition, by which the organs are rendered ſuſceptible of more vivid ſuccuſſions, conſiſts in three circumſtances. 1°. In the fineneſs of the nervous fibres; from whence it reſults, that, other things being equal, they are more eaſily, quickly, and ſtrongly put into a vibrative ſtate. 2°. In the greater tenſion of thoſe fibres, which, other things being equal, muſt have the ſame conſequence. 3°. In the concurrence of the ſmaller and greater tenſion of the nervous fibres; from whence it reſults, that their oſcillations will be eaſier, quicker, and ſtronger, in a double *ratio*.

1°. The nervous *fibrillæ* of women will be finer,

From their original conformation: as it is evident, that the organs have a more acute perception, in ſome ſubjects than in others; and that ſome parts are more acutely ſenſible than others, even in the ſame ſubject.

From the very frequent repetition of former ſuccuſſions: as in thoſe, who are accuſtomed to the frequent uſe of coition, or maſtuprative titillations of women, from whence the nervous fibres are more flexible and vibrative: as it is found in muſical inſtruments, with reſpect to the ſtrings, that the more they are ſtruck, the ſharper they ſound.

2°. The fibres are more tenſe; and, conſequently, vibrate more ſtrongly,

From their natural conformation: whence ariſes the different power in different organs of ſenſe: as one perſon ſees more acutely; and another hears more perfectly.

From the parchedneſs, which happens to the women, in whom theſe parts are dryer by nature, or diſeaſe.

By the phlogoſe inflammation of women; whence the nervous fibres are more forcibly ſtretched. But this phlogoſe tenſion is brought on, either by an *erethiſmus*, in which the fibres of the *uterus* act by re-iterated irritations, and vellications, which a more acrid *ſemen* cauſes; or by the preſence of the *menſes*, particularly if they be retarded, or continue a long time.

3°. Laſtly,

3°. Laſtly, the nervous fibres have a greater degree of fineneſs, and are at the ſame time more tenſe; whenever, if not all, at leaſt ſome of the abovementioned cauſes happen together; and they muſt the more frequently, on account of their affinity. But whenever this concurrence does happen, it will be ſome time after, that the venereal ſenſe will be augmented in a duplicate *ratio*, as well of the too great fineneſs, as the greater tenſion of the nervous fibres.

III. Moreover yet, if it happen, that two of the abovementioned cauſes, of which one depends on the redundance or acrimony of the ſeed, and the other on the too great fineneſs or tenſion of the fibres, come together, as is, for the moſt part, common; becauſe they have an affinity of nature with each other; it muſt reſult thence, that, on one hand, the nervous fibres of the women would be more ſtrongly irritated by the more acrid and abundant *ſemen*; and, on the other, at the ſame time, the motion, which is imparted to them, would be more vividly received; becauſe, when they have a greater degree of fineneſs, and are more tenſe, they are more vibrative: from whence it muſt reſult, that the venereal ſenſe, and inclination, would be augmented in a duplicate *ratio* of each cauſe.

Secondly, We have hitherto ſpoken only of the exceſſive propenſity to coition, ſuch as it is in the firſt ſtage of the diſeaſe, which does not yet conſtitute a *furor uterinus*, unleſs a *delirium* come on; at leaſt the melancholic; of which it is now proper to take ſome notice, though briefly.

Therefore, 1°. The patients, as they glow with inclination to venery, while they retain the uſe of their reaſon, from the natural diſcord or *heterochroniſm* of the fibres of the brain, by which the ideas, as well of the ſubject, as attribute, of this propoſition, *that to give one's ſelf up to luſt is neither honourable nor lawful*, are renewed in the mind, affirm, that it is true, with the ſtrongeſt aſſeveration; nor are ever driven from that opinion, in what degree ſoever they burn with the heat of luſt.

2°. But

2°. But by the re-iterated, and frequent ſuccuſſions of theſe fibres, which are made together, it happens at length, that, by mutual approach, they are brought to the ſame tone; and concords ariſe from diſſonants, or, what is the ſame thing, *iſochronæ* ariſes from *heterochronæ*; whence, the patients having changed their opinions, muſt of courſe affirm now, what they denied before; to wit, *that to give one's ſelf up to luſt is honourable and lawful*; which conſtitutes the *ſecond ſtage* of the diſeaſe.

3°. In the beginning, this preternatural concord of the fibres, brought on by the diſeaſe, does not ſubſiſt continually, but varies in different manners, from ſeveral cauſes: if the deſire of venery grow weaker; if by the reſt of ſleep, the hurried motions of the fibres are rebated; if, by the uſe of anodynes, the fibres be relaxed; if the too great heat of the blood grow more moderate; or if the patients, reclaimed by advice, reproofs, or correction, begin again to have the uſe of their reaſon: whence it ariſes, that the melancholic *delirium* is for the moſt part ſo changeable, in this ſtage of the diſeaſe, with reſpect to its vehemence and intenſeneſs: and, in like manner, the words, and actions of the patients are alſo mutable.

Thirdly, But every thing grows greatly worſe in the third ſtage of the diſeaſe, in which,

1°. As indeed, by the continuance of the diſorder, the fibres which repreſent the ideas of the ſubject, and attribute of the propoſition offered, together, alſo, with many other fibres, in which various ideas are excited, that relate to venery, are abſolutely changed in their tone; ſo that now they become concords with many other fibres, with which they were before diſcords: whence the patient muſt affirm, from this change in them, what they before denied; and deny what they before affirmed: and hence a various and complicate *delirium*, to which raving madneſs, in a ſhort time, ſucceeds: becauſe the patients deviate from right reaſon: and being hurried with a more vehement motion of the ſpirits, fly furiouſly at all, who come in their way;

all

all ſeeming enemies to them: and thence ariſes a truly maniacal *delirium*.

2°. It is to be obſerved, however, in the *mania*, which is cauſed by the *furor uterinus*, the *delirium*, though it ſpreads farther than the melancholic, is not univerſal, but extends only to ſome objects, which relate to venereal matters, as has been ſaid before, from whence aroſe the firſt conſciouſneſs of the diſorder, which is not peculiar to the uterine, but common to every deuteropathic *mania*, which ſucceeds to a melancholic *delirium*: though the contrary is found in the protopathic *mania*; in which the *delirium* ſpreads much farther. But it is ſufficient here to touch on this: which will be more diffuſively and clearly explained in the Treatiſe *on the diſeaſes of the head*, that, I hope, in a ſhort time to publiſh, if God give me life and leiſure.

§. III. Differences.

Though the *furor uterinus* is, in its own nature, not very variable, it is ſubject, nevertheleſs, to ſome differences: not indeed eſſential; but ſuch as are neceſſary to be known, in order to have a perfect knowledge of the diſorder.

It is, therefore, diſtinguiſhed, I. With relation to the ſtate or ſtage,

1°. Into the beginning, when there is an exceſſive degree of luſt; but which the patients, hitherto poſſeſſed of the uſe of their reaſon, and conſcious of the turpitude, of which they have an abhorrence, ſtrongly repreſs; or carefully conceal.

2°. Into the confirmed ſtate, with the melancholic *delirium*; in which the diſeaſe growing worſe, the luſt is ſo unbounded, that the patients, now diſordered in their ſenſes, laying aſide all modeſty, if they do not offer themſelves in the moſt open manner, ſhow, at leaſt, ſufficiently, that they are ready for the buſineſs, by laſcivious geſtures, and ſtrong expreſſions.

3°. Into the extreme degree of the diſeaſe with the maniacal *delirium*; in which it burſts forth into a

raving madneſs; that is, into a more univerſal *delirium*, attended with fury; and ſuch, that ſhame being wholly diſregarded, the patients, void of the leaſt degree of reaſon, openly ſollicit and urge all men whatever, to lie with them: and, if they refuſe, aſſault them with the moſt violent rage.

II. It is diſtinguiſhed, with relation to the cauſe, into the *furor*,

1°. Which is cauſed by the faultineſs in redundance, or acrimony, of the *ſemen*; or both together: whence the ſtimulus to venery is augmented.

2°. Which is cauſed by the faultineſs of the nervous *fibrillæ*, interwoven in the female parts of generation, that are more than commonly diſpoſed to vibrate, from their fineneſs, or their tenſion; or from both together: whence a more acute perception of the venereal ſenſation.

3°. Laſtly, which is cauſed by the faultineſs, as well of the *ſemen* as the *parts:* whence the degree of the whole is augmented in a double *ratio* of the ſimple cauſes.

III. It is diſtinguiſhed with relation to the ſymptoms which come on,

1°. Into the *furor* UTERINUS, WITHOUT DELIRIUM; ſuch as it is in the firſt ſtage at the *beginning*.

2°. Into the *furor* UTERINUS, WITH THE MELANCHOLIC DELIRIUM: ſuch as it is in the ſecond ſtage, or *confirmed*.

3°. Into the *furor* UTERINUS, WITH THE MANIACAL DELIRIUM: ſuch as it is in the third ſtage, when in the greateſt degree.

§. IV. SYMPTOMS.

The ſymptoms of the *furor uterinus* are various, according to the different ſtages of the diſeaſe: but all are eaſily deducible, from the theory laid down, as ſo many corollaries.

I. In the *firſt* ſtage, 1°. The patients perceive themſelves reluctantly to burn with luſt: but duly conſcious to themſelves, that *it is vile and wicked*,

to

to indulge such inclinations, they remain anxious, solitary, sad, thoughtful, and silent.

2°. But, nevertheless, continually dwelling on obscene thoughts, they are more faintly affected by all other sensations, even those of hunger, and thirst; and thence it arises, that they neither eat, nor drink, whatever occasion there may be for either.

3°. So vivid, indeed, is this attention of the mind to venereal matters, which wholly possesses it, that those fibres of the brain, in which the ideas of such matters are renewed, being more tense, strongly oscillate without intermission: whence it proceeds, that they are less disposed to sleep than naturally.

4°. In the mean time, conscious of their vileness; hitherto, while they retain their reason, they endeavour to restrain, and carefully conceal, the desires with which they burn.

5°. But if any wanton conversation happen; if they hear any careffive discourse; if they think themselves tempted by any allurements; their mind being in a weak state, they soon show their inclination.

6°. It is common, however, in this stage of the disease, to have remissions, which the administration of remedies, change of air and weather, more careful diet, and some critical evacuation, produce: and in which the patients behave more sensibly; and appear to recover their reason, though seldom perfectly: but such lucid intervals are not to be depended upon; because a relapse of the disease succeeds shortly, in a more strong and aggravated degree, than at first.

II. In the *second* stage, 1°. The disease gaining ground, the fibres of the brain, which are designed by nature for recollecting venereal matters, begin to be so depraved in their tone, as has been said above, that as the patients positively believed before, *that it was not right to abandon themselve to lust*, now from the new error, which is the beginning of the melancholic *delirium*, they continue in a precarious state; and sometimes seem rational: but at others losing the sense of shame, endeavour to indulge their lust, wantonly

inciting the men, who come in their way; or plainly aſking them.

2°. If any glimſe of hopes preſents itſelf, that they are going to obtain what they ſo eagerly deſire, they talk merrily, careſs thoſe whom they preſs and invite; and being hurried away by the violence of the erroneous paſſion, which blinds them, they urge and ſollicit, if there be any delay, that they may be quickly gratified. But if they perceive themſelves deluded by their hopes, they become ſad, and complaining, go away muttering to themſelves.

3°. Every thing grows worſe from day to day; and the natural tone of the fibres is ſo perverted, that their diſcord changes into perfect concord; and the patients, therefore, gain a firm belief, that it is right to give themſelves up to their luſt: and thence ſay and do every thing, that the moſt vile depravity of mind can dictate.

III. In the *third* ſtage, 1°. The diſeaſe changes into raging madneſs; as has been mentioned before: and the patients raving particularly about thoſe things, which relate to venery, continually ſpeak obſcene, immodeſt, words; and ſollicit all that come in their way to the act: they firſt urge, and even compel them careſſingly; but if they meet with an obſtinate refuſal, they fall furiouſly on them, with their fiſts and nails.

2°. Moreover, all the reſt of the ſymptoms, which attend a *mania*, come on: as a conſtant *agrypnia*; an abſence of hunger and thirſt; but without fever; a patience of cold; blackneſs, ſparingneſs, thickneſs, ſaffron colour, &c. of the urine; of which we ſhall ſuppreſs the explanation; as they do not belong to this place.

IV. Beſides theſe, there are other ſymptoms, which ſeem to belong to every ſtage of the diſeaſe. As, 1°. A ſtong vellication, which the more acrid ſtate of the *ſemen* brings on the UTERUS and VAGINA, excites an almoſt conſtant *erethiſmus* of thoſe parts: whence being convulſively contracted, they conſtringe the veſſels

veſſels ſurrounding them; retard the courſe of the blood; and give place to a *phlogoſis*, ſuch, as many times we read to have been found in the dead bodies of thoſe [1] who had the *furor uterinus*. For the *phlogoſis*, as it is ſometimes, according to what has been before ſhewn, the cauſe of the diſeaſe, is alſo ſometimes meerly a ſymptom; but which, if it come on, greatly aggravates the violence of the diſeaſe.

2°. It is thence leſs to be wondered at, that the female parts of generation grow hot and dry, in the *furor uterinus*; that the *parietes* and coats of the *vagina* and *uterus* become rigid; and that the *vagina*, diſtended [2] by the rigidity of its coats, gapes with a conſtant ſtiffneſs, and remains open: each of which have been found in obſervations.

3°. It muſt, alſo, analogouſly happen from thence, that the *clitoris* [3] grows greatly more large than common: that one or both of the *ovaria* tumefy preternaturally, with a thick viſcid purulent humour; or be filled with *ova*, exceeding the natural magnitude; and that the Fallopian tubes themſelves ſhould partake frequently of a ſimilar ſtate; as has been obſerved in many patients, who have died [4] of this diſeaſe.

4°. A *virus flows* ſometimes *from the groin*, in women having the FUROR UTERINUS; either, becauſe, by continually making a lewd friction on the parts, by the fingers, to excite venery, they bring on, by ſcratching, a diſcharge of ſome thick viſcid humour: which runs

[1] Joſephus Lanzonus, *Miſcel. Natur. Curioſor. Decur. III. Ann.* 5, & 6.

[2] Chriſtian. de Helwich, *Ephemerid. German. Centur. I. & II. pag.* 310.

[3] The *clitoris* ſwells, alſo, in the *furor uterinus*, from the maſturprarion, that is practiſed.

[4] Joh. Michaelis, *Praxis Clinicæ Specialis Caſu* 22.

Dominicus le Duc, *Zodiaci Medico-gallici Ann.* 1. *Obſervat.* 7.

Fridericus Lochnerus, *Ephemerid. Germanicar. Centur. VII. & VIII.*

Stephanus Blancardus, *Anatom. Practicæ, Centur. II. Obſerv.* 99. Item *Collectanea Medico-phyſica, Part. I. Obſervat.* 28.

Carolus Philippus Geſnerus, *Actor. Phyſico-medicor. Volum. VII. Obſerv.* 30.

from the *vulva*; or becauſe purulent matter iſſue from ſome fiſtulous ulcer of the *uterus* or *vagina*.

5°. It reſults, from what has been ſaid, that, in the *furor uterinus*, tumours; *ſteatomas*; hydatids; apoſtems; a diſcharge of *pus*; and a *phlogoſis* of the *uterus*, and neighbouring parts; very frequently precede diſeaſe, as cauſes; or follow it, as ſymptoms: and as often as any of them come, however they may come, brings on the diſeaſe, which admits of no abſolute cure; but of which the patients, after many and various torments, ſooner or later, die a miſerable death.

§. V. DIAGNOSTIC.

I. The diagnoſtic of the diſeaſe is obvious from the pathognomonic ſymptoms; which we have mentioned; to wit, an unbounded luſt; a melancholic raving about venereal matters; and a maniacal raving, which ſucceeds the melancholic.

II. The diagnoſtic of the ſtates, or ſtages, of the diſeaſe, are not leſs evident. 1°. If there be only an unbounded luſt, which the patient, having ſometimes the uſe of her reaſon, endeavours to repreſs; but of which, nevertheleſs, at others, plain ſigns are given; this will be the *firſt* ſtate, or ſtage, of the diſeaſe.

2°. If the lewdneſs gains ground, they begin to loſe their ſenſes, and rave in a melancholy manner about venereal matters; and get the notion into their minds, that *it is right to give themſelves up to their luſt*; and, in conſequence of that notion, behave themſelves immodeſtly; it is the *ſecond* ſtate, or ſtage of the diſeaſe.

3°. If poſſeſt with a raging madneſs, they talk various abſurd things, or rave furiouſly about many; in ſhort, if they be maniacal; compel all they meet to the act; allure them with immodeſt geſtures; and, if they refuſe, become raging; the diſeaſe is then arrived to the *third* ſtate, or ſtage.

III. *The diagnoſtic* of the cauſes of the diſeaſe would be indeed very difficult, if it were required to be accurately

curately diſtinguiſhed: but ſuch a nicety would be of no uſe to the cure: as well, becauſe both cauſes of the diſeaſe, the diſordered ſtate of the *uterus*, and the depravity of the *ſemen*, for the moſt part, happen at the ſame time; and, therefore, both come under the ſame method of cure; as becauſe, if they do not happen together, which is neither frequent, nor can be long the caſe, they require the ſame, or a ſimilar method.

§. VI. PROGNOSTIC.

The *furor uterinus* is a ſhameful and immodeſt diſeaſe, of which the ignominy not only falls on the patient, but alſo affects thoſe related to her.

In general, it is difficult of cure, which it has in common with other caſes of madneſs: and it is more difficult, in proportion as it is of longer ſtanding. But in order to inveſtigate the whole more exactly, it is proper to diſtinguiſh the different ſtages of the diſeaſe.

I. In the *firſt*, it is for the moſt part curable, if it be diligently, and quickly taken in hand, before the *delirium* come on. But the cure will be in vain attempted, if the treatment be begun later: and I think there is not any diſeaſe to which this common expreſſion can be applied with more truth;

Principiis obſta, ſerò Medicina paratur,
Cùm mala per longas invaluêre moras.

II. In the *ſecond*, when the melancholic *delirium* firſt comes on, the diſeaſe is incurable: becauſe it goes on at length to a total loſs of reaſon, unleſs a quick death prevent it. Sometimes there appears to be glimmerings of hopes of a cure, if the diſeaſe have frequent and long lucid intervals; but in them, there is never any ſecurity, nor exemption from the fear of a relapſe; becauſe there is always a hazard, that the ill ſuppreſt fire may burſt out again.

III. In the *third*, at laſt, in which there is a *mania*, the diſeaſe may be juſtly deemed incurable: as there

is ſcarcely the leaſt hopes, that the patients will ever recover their ſenſes; but they will all be carried off by ſome [1] apoſtem, ulcer, or *ſchirrus* of the *uterus*, Fallopian tubes, or *ovaria*; which brought on the diſorder that produced the *furor uterinus*; or, on the continuance of the diſeaſe, fall into a total depravity of reaſon till they die.

IV. The following matters, relative to the prognoſtic, are found true, by unqueſtionable obſervations; and therefore ſeem proper to be mentioned.

That the *furor uterinus* will go away of itſelf, 1°. If the patient ſhould have an [2] immoderate diſcharge of the *menſes*, or an uterine *hæmorrhage*: becauſe the ſurface of the *uterus*, being thence ſoftned, and relaxed, the venereal perception is rendered leſs acute.

2°. If a copious hæmorrhoidal flux ſhould come on: becauſe by means of the *anaſtomoſes*, by which the veſſels communicate with each other, the veins of the *uterus* would be unloaded, while the hæmorrhoids flow; and the *uterus* thence freed from the tumefaction, and relaxed.

3°. If the patient ſhould undergo a large, and long-continued diſcharge of the *fluor albus*, in which the *uterus* ſhould be moiſtned and cooled; and, conſequently, the ſtimulus of luſt be rendered weaker.

4°. If the patient [3] ſhould become pregnant: becauſe the humour of the *placenta* of the *fœtus*, being contained in, and conſequently moiſtning them, would mollify and relax the coats of the *uterus*, and render them leſs ſenſible to the irritation of luſt: but a relapſe of the diſeaſe will eaſily happen, unleſs the patient be again pregnant within a year, or two, from the time of her lying in.

[1] Vide Auctores ſuprà laudatos, *ad Symptoma* 3. *Art. IV.* §. *IV. pag.* 365.

[2] Alexander Benedictus, *de Curand. Morb. Libr. I. Cap.* 28.

[3] Dominicus Panarolus, *Pentecoſt. III. Obſerv.* 9.
Johannes Matthæus de Gradibus, *Conſilio* 8°.

5°. If

5°. If she be vigorously enjoyed: which has indeed had many times good effect, even in [1] matrimony: but much better, if what is said be true, [2] in a general commerce with men; whenever it happens, that the patients, becoming common, are had by many gallants.

6°. If the *uterus*, in case of a *descensus*, be suffered to be exposed to the air till it become cold. I am sensible, this is related only by Harvey; but I am sensible, also, that his authority alone is equivalent to that of many. *He says*, "that [3] to a woman of qua-"lity, mad with an *uterine furor*, and melancholy "for more than ten years, to whom, after all means of "cure had been in vain tried, a *descensus* of the *uterus* "happened; I ordered, *continues he*, that the *uterus* "should not be put back, till its undue degree of heat "had been moderated by the external air. This suc-"ceeded according to my expectations; and in a "short time afterwards she recovered; and the *uterus*, "being at length reduced, remained in its proper "place; and she enjoys her life in a healthful state."

§. VI. *Method of cure.*

All the stages of the *furor uterinus* are so many particular diseases; which, however they may seem to be of the same general nature, and brought on by the same cause as the others; yet varying in the proportion, must be deemed to differ, if not in species, at least in degree; which it is, therefore, proper to explain in distinct articles.

[1] Zacutus Lusitanus, *Prax. Medic. Admir. Lib. II. Observ.* 93.
Johannes Riolanus, pater, *Method. Medendi Sect. IV. Tractat.* 2. *Cap.* 21.
Dominicus Leo, *Art. Medendi Libr. II. Cap.* 9.
Ambrosius Stegmannus, *Ephemerid. German. Decur. III. Ann.* 1, *Observ.* 11.

[2] Alexander Benedictus, *de Curand. Morbis Libr. I. Cap.* 28.
Thomas Bartholinus, *Observ. Anatomic. Cent. II. Observat.* 69.
Christoph. Johann. Langius, *Praxeos Medic. Cap.* 24. §. *XV. Ubi laudat Observationem Plateri.*

[3] De Partu, *extremo Libro.*

Method

Method of cure in the firſt ſtage of the diſeaſe.

In the firſt ſtage of the diſeaſe, all the intentions of cure ought to be directed to theſe views, 1°. That the acrid blood, and the ſeminal humour produced from it, and, therefore, participating of its depravity, ſhould be diluted, and corrected. 2°. That all the internal ſurface of the *vagina*, and *uterus*, ſhould be moiſtned, and relaxed, to remove the morbid and unbounded luſt. 3°. That, in the mean time, the patient, as much as poſſible, ſhould be diverted from obſcene thoughts; and the bent of her mind turned towards ſuch as are more proper; both which may be obtained by the following methods.

I. To dilute, and correct, as well the blood, as the ſeminal humour, are of avail,

1°. Bleeding in the arm, unleſs the *menſes* near, or at the time of ceaſing, make it proper to be performed in the ankle. It is neceſſary, however, to bleed copiouſly, and frequently, in proportion to the age, conſtitution, and ſtrength of the patient, and the violence of the ſymptoms.

2°. Frequent purging with gentle cathartics; of which the virtue and efficacy is proper to free the *primæ viæ* from the bad chyle; and to evacuate the *cacochymia* of the blood; but which have leaſt tendency to irritate, vellicate, or throw the inteſtines into ſpaſms, leſt the *uterus* be affected by it, through the conſent of parts.

3°. The uſe of broths, or apozems, which are made of,

The roots of water lily,
——— marſh-mallows,
——— ſuccory,
——— ſorrel,
} to the quantity of one ounce.

The

The leaves of water lily,	to the quantity of one ounce.
——— lettuce,	
——— purſlain,	
——— willow,	
——— lens paluſtris,	
The leaves of hemlock,	to the quantity of two handfuls.
Flowers of water lily,	to the quantity of one or two handfuls.
——— mallows,	
——— poppies,	
——— violets,	

From which three or four muſt be choſen, that are moſt approved of; and from them the broths, or apozems, made according to art, twice in the day, morning and evening; to be given at the greateſt diſtance from the meals, for ſeven days together; adding to each, *ſal prunellæ*, chryſtal mineral, or the *ſal ſedativus* of Homberg.

4°. Whey clarified, and ſtrained through a filtering paper, to the quantity of four glaſſes, or draughts in the day, at the greateſt diſtance from the meals; in one of which draughts may be boiled, an ounce of water lily root, cut into ſlices; or half an ounce of the ſyrup of water lily may be added to it. The whey will be of more efficacious effect, if it be taken as the only drink, and be not diſagreeable to the patient.

5°. Aſſes milk, taken twice a day, in the quantity of nine or ten ounces, morning and evening, if the ſtomach can digeſt it. But if the patient be conformable, and eaſily ſubmits to this tireſome diet, it would more conduce to the effect, that milk ſhould be taken for the whole food, in the place as well of dinner, as ſupper; beſides the draught of aſſes milk, morning and evening, two other draughts of cows milk, or various diſhes, prepared with ſuch milk, ſhould be given.

6°. Emulſions,

6°. Emulsions, twice a day, morning and evening; four draughts of which may be made of the four greater cold seeds, in the quantity of three ounces; or from

The seeds of lettuce,	from three ounces to four.
——— purslain,	
——— white poppy,	
——— hemp,	

All which must be diluted in a marble mortar,

In the distilled water of water lily,	from four ounces to five.
——— lettuce,	
——— purslain,	
——— endive,	

To the filtered fluid of which is to be added,

The syrup of violets,	in the quantity of one ounce.
——— water lily,	
——— marsh-mallows,	

It is usual from these seeds, waters, and syrups, to chuse those which are most approved of, few in number, and in such a proportion, as is neither too great, nor will make the draught too thick.

7°. Mineral waters, of the chalybeate kind, to be daily drunk, for a month, if the weather favour, in the quantity of two or three pints, some purgative salt being added in the first draughts: such as *sal de duobus*, in the quantity of three drams; *sal de seignette*, in the quantity of two ounces; or Epsom salt, in the same doses. Among the waters of this kind in our own country, are greatly commended, those of Vals, Caransac, Bussan, Pougues, Forges; and among the foreign, those of Spa, and Selter.

8°. An exact diet, with relation to which, by the rules of art, the patients ought chiefly to eat food,

that moiſtens, corrects, dilutes, and cools, as are the various kinds of garden ſtuff; as,

Cucumbers,	Lettuce,
Melons,	Purſlain,
Borage,	Succory,
Bete,	Spinage,
Endive	Orach.

And ripe fruit; as,

Cherries,	Ripe grapes,
Strawberries,	Plumbs,
Apples,	Currens.

Laſtly, puddings, or creams of rice, with weak veal, or chicken broths.

Wine, chocolate, coffee, and all fleſh, except veal, chicken, and young rabbets, muſt be forbidden.

Laſtly, narcotics are to be adminiſtered, which procure ſleep; if it be ſparing, or ſhort, in the diſeaſe.

9°. The propoſed remedies, if it ſeem proper, ſhould be either changed for each other, or preſcribed together, as they may be ſucceſſively required: but they muſt be continued for a long time: and it is not to be expected, that an obſtinate, and almoſt incurable depravity of the whole maſs of humours, greatly heated, can be corrected, or changed for the better, by ſlight means.

II. The internal medicines, of which we have largely ſpoken above, conduce to moiſten, and lax the *uterus:* but it is much more effectually done, by the following external or topical remedies.

1°. Baths, or half baths, of cold river water, in which has been boiled, the leaves of the emollient plants, that have been mentioned before in the preceding article *n°* 3. It is uſual for the patient to go into them twice a day, and continue there for two hours; and to propel the water with the hand, or a ſponge, high into the parts of generation, that they may be bathed by it.

2°. Glyſters,

2°. Glysters, to be frequently injected,

Of whey,

With the decoction of lettuce,
——————— purslain,
——————— navelwort,
——————— houseleek,
——————— water lily,
——————— leaves of willow,

To which may be added oxycrat, in the quantity of some ounces, and after received, they must be a long time retained, that more certain means may be obtained for the refrigeration and madefaction of the internal parts.

3°. Injections, gently warm, must be made by an uterine funnel or syringe,

Of whey,

The decoctions of barley,
——————— lettuce, or some of the abovementioned herbs;

Which must be carefully thrown into the cavity of the *uterus*, if the mouth gape; as is common, for the most part; and retained there for a long time: the patient being placed in a proper posture. If the disease be urgent, it is serviceable to add to each injection half a dram, or a dram, of the juice of nightshade, *(Morella)* houseleek, or even hemlock.

4°. Pessaries introduced into the *vagina*; which are variously compounded: for sometimes pieces of cloth, made into the form of a roll; or a soft sponge, cut into lengths, steeped in a thick, and cold decoction of some emollient herbs; are put into the *vagina*: and sometimes a long linnen bag, full of the pulp of the same herbs, is thrust into it: but which ever it may be, it is proper, after a short time, to take out the first, and introduce others successively, to prevent their growing warm, by their too long continuance.

5°. Leeches,

5°. Leeches, fewer or more, as there may ſeem occaſion, placed on the edge of the *podex*, if it be greatly ſwelled in conſequence of the *phlogoſis*: becauſe the blood may be by their means derived from the veſſels of the *uterus*, with which the hæmorrhoidal veins communicate by many *anaſtomaſes*: for which reaſon, the emptying theſe veſſels relaxes the ſubſtance of the *uterus*. I do not, however, abſolutely preſcribe this kind of relief: but as it may ſometimes be ſerviceable; I did not think proper to omit mentioning it.

III. While theſe remedies are practiſed, it muſt be endeavoured, by every method and means, to divert the patient from obſcene thoughts; and to remove their melancholy; to which end,

1°. They muſt be excited, driven, compelled, by frequent advice, admonition, and chiding, to abhor their laſcivious diſpoſition; and, from a ſenſe of modeſty, reſtrain their deſires; and at length baniſh them from their hearts.

2°. Care muſt be taken that they aſſociate with prudent companions of known virtue; but jovial and merry, with whom they may chearfully and genteelly converſe; and by whoſe example and diſcourſe, they may be in ſome degree brought back to a reaſonable way of thinking.

3°. Their minds muſt be engaged by walking, dancing, aſſiſting in the work of a farm, feaſting, and journies; that, being amuſed by every pleaſure, they may be diverted from the obſcene thoughts with which they were poſſeſt. It is of conſequence, indeed, to employ them, alſo, in domeſtic buſineſs, if they could be prevailed upon to apply diligently to it; but for the moſt part they cannot, or will not.

4°. All talk of venereal enjoyments, books of love, and lewd ſongs, muſt be ſtrictly forbidden them: and great care muſt be taken, that they have no familiar commerce with men; nor indeed any converſation with them at all; particularly thoſe for whom they ſeem to have any fondneſs.

5°. Meaſures

5°. Measures must be taken that they do not lie on feather-beds, or mattrasses of wool, by which the heat of their loins may be augmented, and that of the parts of generation, already too greatly aggravated, be increased, but on beds of soft straw, *paillias*ſes, or at most, such as are stuffed with horse-hair.

6°. Lastly, if these methods fail of the desired effect, without further delay, they should be married, supposing circumstances to allow it, to some of their lovers, indeed, if it can be rendered convenient; but if not, to any vigorous young men, who may be amiable, if not beloved: which is, as was before said, §. VI. *Of Prognostic*, *n°* 5. the most certain and efficacious medicine in this stage of the disease.

In the second stage.

When, after the melancholic *delirium* is come on, every thing grows worse, it is necessary to administer the remedies more assiduously, and in greater doses; and to select those which are most efficacious: but from those classes, that are agreeable to the particular intentions of cure, which arise.

Therefore, 1°. Bathing should be used more frequently, and twice in a day, in cool water, repeatedly poured over the head; in which the patient should be kept for four hours, if it can be done.

2°. It is proper to try every kind of remedy proposed in the preceding stage. Frequent bleedings; whey for the whole drink; or very cooling ptisans; diluent and emollient apozems; emulsions or juleps; mineral waters; &c: which must be persisted in for a long time, that the violence of the disease may be overcome, or at least abated.

3°. Care must be taken, that the patient have sufficient nourishment, even plentifully, of a kind that is of easy digestion, and cooling, such as was proposed for the preceding stage.

4°. If there be no sleep a nights, or a restlessness, narcotics must be administered, in a dose suitable to the

the diſeaſe: amongſt the firſt of which are the *tinctura anodyna*, from twenty-four drops to thirty; or the *laudanum opiaticum*, from one grain to two.

5°. It is proper to purge frequently, and with the more powerful cathartics; to wit, *(in a liquid form,)* with the decoction of three drams of ſena, and two drams of the *ſal de duobus*, diſſolving, in the ſtrained fluid, two ounces of manna; and adding ten or fifteen grains of *diagrydium:* and, *(in a dry form,)* with a bolus of *diagrydium*, and jalap, powdered, each in the quantity of twelve grains; eight grains of the powdered root of black hellebore being added; obſerving this caution, that, while the medicine operates, a draught of ſmall veal broth, boiled with ſome leaves of ſuccory, ſhould be given every hour.

In the third ſtage.

When the *mania* firſt comes on, the diſeaſe is almoſt deſperate; but all care of the patient ſhould not, however, be laid aſide. For, on the contrary, it ſhould be endeavoured, with the greateſt aſſiduity, to mitigate their misfortune as much as is poſſible.

To which end, 1°. There is occaſion for frequent bathing in cold water; which ſhould be many times repeatedly poured on the patients heads; and in which they ſhould be kept as long as their ſtrength will bear it.

2°. Frequent and copious bleedings muſt be performed in the arm, ankle, and neck, till the ſtrength being diminiſhed, the *furor* of the patients may be repreſſed; and they being made conſcious of their weakneſs by the ſervants who attend, may be rendered more tractable.

3°. Evacuation of the bilious humour, very often repeated, by diaſtic purges, or with vomits; by which not only all the depraved matter in the inteſtinal canals, but, alſo, in all the *viſcera*, that communicate with the inteſtines, may be effectually removed.

4°. The heated *uterus* ſhould be cooled, by injecting *oxycrat*, cold, or only gently warm, from time to

time, if the patients ſubmit to this treatment, as they generally do: becauſe they themſelves are fond of remedies againſt the itching and burning of the *uterus*, with which they are tormented.

5°. If the patients have no ſleep at nights, as is almoſt always the caſe, ſuch narcotics ſhould be given them, even in large doſes, as may be ſufficient to procure ſleep: but it is proper to adminiſter them only at intervals, leſt any harm may be done by too large, and too cloſely repeated doſes.

6°. Care muſt be taken, that they may eat plentifully; but of what is eaſily digeſted, and cooling: and at laſt, if they rage greatly, they ſhould be tamed by beating, and ſecured by chaining, leſt they do harm to themſelves, or thoſe who are near them.

§. VIII. *Remedies which are recommended againſt the* furor uterinus.

I. By moſt phyſicians [1], camphor is poſitively recommended as a ſpecific for aſſwaging the heat of luſt in the *furor uterinus*. It is given in ſubſtance from ten grains to fifteen, in any vehicle; or in the form of a bolus: ſometimes a lump of it, of twelve grains weight, is ſet on fire; and thrown into a draught of water; which is afterwards given to the patient to be drunk.

I wonder whence this opinion of the anti-aphrodiſiac virtue of camphor aroſe: whether from that common verſe,

Camphora per nares caſtrat odore mares,

which was received on no other foundation, than the falſe notion, that camphor was held to be of a cold nature, though it is manifeſtly of a hot one.

I have myſelf found, by experience, that the common opinion, concerning the virtues of camphor, if

[1] Vide Michaelem Ettmullerum. *De Morbis Mulierum. Cap.* 2. Et alios paſſim.

it

it be not falſe, is certainly not always true. For in the caſe of two women, who had the *furor uterinus*, I adminiſtered it many times, and in great doſes, without any ſucceſs.

II. If credit be given to Ettmuller [1], the limpid and watery fluid, which diſtils from the tender branches of willows, when they are cut in the ſpring, is of great avail in the *furor uterinus*. He propoſes this fluid either to be given alone, or in a cake, made by kneading flower with it; *which being adminiſtered to the patient, extinguiſhes all propenſity to venery. The ſame thing is done*, he ſays, *by a decoction of the young willow, often drunk with an empty ſtomach: for it not only reſtrains the inclination to venery; but ſometimes renders the women abſolutely barren.*

Prevailed upon by ſuch ſtrong aſſertions, though I could not obtain the fluid dripping from the cut branches of willows, while the two women before mentioned were under my care, it being then autumn, I made a repeated trial of the leaves of willow in large doſes: but I do not remember that it was of the leaſt benefit.

III. The *agnus caſtus* or *vitex* is extremely celebrated for allaying the *ſtimulus* of luſt. It is boiled in broths, apozems, ptiſans, or uterine injections. I have never proved the virtue of it: but the bitterneſs, and acrimony, which are perceived in the leaves, when chewed, and more particularly in the ſeeds, render its anti-aphrodiſiac virtue juſtly dubious. It may be added, that the *agnus caſtus* is preſumed to excite the *menſes* [2]: which affords a ſtrong argument, that it is not indued with ſuch a quality. But, however, as there is no hazard in the uſe of it, there is no reaſon why any one ſhould not try it, at their pleaſure, if there be occaſion.

IV. We have ſeen above, that it is neceſſary, in the cure of the firſt ſtage, the patients ſhould lie on

[1] Vide Michaelem Ettmullerum. *De Morbis Mulierum. Cap.* 2. Et alios paſſim.

[2] Dioſcorides, *Libr. I. Cap.* 135.

beds of ſtraw. But thoſe who confide in the efficacy of the *agnus caſtus*, propoſe, that they ſhould lie on beds ſtuffed with dry leaves of it: an inſtance being borrowed from the *Athenian matrons*, *who in the Theſmophorii*, or ſacred rites of *Ceres*, *preſerving their chaſtity*, *made themſelves beds of the agnus caſtus:* Pliny [1], and Dioſcorides [2], being referred to, whoſe opinion I will not conteſt; though I am not convinced of the virtue of the *agnus caſtus*. I would, however, have it known, that there muſt be a conſtant trouble, in renewing the beds; becauſe the dried leaves of this ſhrub are ſoon reduced to the ſtate of a powder.

V. The phyſicians, who have more particularly treated of the *furor uterinus*; as Sennertus [3], and Riviere [4]; among other truly anti-aphrodiſiac ſimples, have enumerated ſome, that are of a nature widely different; as dill; the ſeed of the *duncas*; the *lignum aloes*; rue; mint; and even turpentine itſelf: which, as they are acrid, and powerfully promote the *menſes*, rather tend to inflame an exceſſive inclination to venery, than to mitigate it. For which reaſon, it ſeems proper to give a caution, that no one, induced by the authority of ſo many authors, ſhould believe, remedies of this nature can be adminiſtered with ſucceſs againſt a *furor uterinus*.

VI. The ſame authors extol ſome remedies, with too high praiſes, which ſeem to afford but ſmall ground of hopes. Thus Sennertus [5] praiſes a water, that he calls *the water of chaſtity*, which is a kind of julep, formed of diſtilled waters:

℞ *Aquar. Menthæ, Chelidoniæ, Anethi, Liliorum convallium, Liliorum alborum, Nymphæ,* āā ℥j. M. *Doſis unc. ij vel iij.*

[1] Hiſtor. Natural. *Lib. XXIV. Cap.* 9.
[2] *Libr. I. Cap.* 135.
[3] Practic. *Libr. V. Part. II. Sect.* 3. *Cap.* 5.
[4] Praxeos, *Libr. XV. Cap.* 5.
[5] Ubi *ſuprà*.

The

The ſame author commends, alſo, another water diſtilled from ſeveral plants, according to the following manner.

℞ *Fol. Nymph. Vitic. Salic.* āā *m. iij. Lactuc. Portulac. Umbilic. Veneris,* āā *m. j.*
Semin. Lactuc. Papaver. quatuor Frigidorum majorum, āā ʒ ß.
Aneth. ʒij.
Florum Nymph. m. j.
Violar. mß.
Contundantur omnia recentia, & irrorentur ſucco Limonum, ac ſtent in digeſtione horis 24; *poſtea diſtillentur, & diſtillati ſingulis libris add. Camphoræ* ʒj. *Servetur ad uſum.* Doſis ʒj.

Which is found in the ſame words in [1] Riviere. But I imagine that both theſe remedies are of little ſervice in the *furor uterinus*, for two reaſons. 1°. Becauſe ſome plants, as mint, celandine, and dill, are admitted into their compoſition, which increaſe, rather than abate venereal deſires. 2°. Becauſe it is certain, that waters, diſtilled from plants, are of leſs ſervice than decoctions of the ſame; and ſhould not, therefore, be brought into uſe, except where the freſh plants are wanting.

VII. Hemlock is recommended by all the more antient phyſicians for the *furor uterinus*. They prepared cataplaſms of the bruiſed leaves, and applied them to the loins; and mixed the expreſſed juice of it with uterine injections: and they even gave it, by drops, to be taken by the mouth, in various draughts. In order to confirm this method of practice, they produce the authority as well of St. Baſil, who ſays [2], *ſe vidiſſe quaſdam fœminas, quæ potione cicutæ extinxerint rabioſas cupiditates*; as of St. Jerom, who writes [3], *Hierophantas pontificatum adeptos cicutâ ſe caſtraſſe.*

[1] Ubi *ſuprà.*
[2] Homil. V. ſuprà Hexaemer.
[3] Contra Jovian.

I am

I am ignorant what ought to be thought of the anti-aphrodisiac virtue of hemlock, as I have made no trial of it: but I am apt to believe, that the authority for this quality of the plant took its rise from the false notion, that it was cold; whereas, on the contrary, it is hot. But it happens fortunately, that now it may be tried without any hazard: as it is known that the juice of hemlock, moderately inspissated, is given daily to patients affected with cancers, to the quantity of many grains, without any danger; of which more will be said below, *Book II, Chapter VII.*

VIII. As various chemical preparations were at first received into use, those, who trust too much in chemistry, have not ceased to obtrude many preparations of lead for several diseases, and particularly the *furor uterinus:* especially the *saccharum saturni*, of which some grains are proposed to be dissolved in uterine injections; and what is of still more consequence, in those draughts, which are to be taken by the mouth. But we have, and not without reason, expressed our condemnation of this above.

IX. There remains a question of yet higher moment. Some physicians [1] advance, that, by titillating the privy parts of women, a discharge of corrupted *semen* is produced, from whence the first cause of the disorder arises [2]: which others think to be wicked and forbid by religion. It is not our business to decide such a dispute, concerning which, let those be consulted, into whose proper province and jurisdiction this decision falls: but I shall intimate, that such a decision would be in fact vain: as the patients themselves, from their own disposition, or rather from the effect of the disease, perpetually use mastupration with them-

[1] Varandeus. *De Morbis Mulierum, Libr. I. Cap.* 5. & Antiquiores omnes.

[2] Riverius, *ubi supra.*

ſelves; and neither deſire, nor ſeek, for any other help: in which, however, they greatly injure themſelves; as this maſtupration does not in the leaſt abate the violence of their luſt; but rather inflames it. It would, nevertheleſs, be preaching to the deaf, to endeavour to keep them from this vile practice by advice: from which nothing, indeed, can hinder them, unleſs they be chained.

FINIS.

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